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Contemporary Issues in Humanities and Social Sciences

Interdisciplinary Perspectives

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Contemporary Issues in Humanities and Social Sciences: Interdisciplinary Perspectives

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Preface

The twenty-first century is characterized by unprecedented transformations driven by technological innovation, environmental challenges, social change, and increasing global interconnectedness. These developments have created new opportunities for progress while simultaneously raising complex questions concerning sustainability, governance, justice, cultural preservation, and human well-being. Addressing such multifaceted challenges requires interdisciplinary scholarship, collaborative research, and the exchange of diverse perspectives across geographical and academic boundaries.

This edited volume brings together contributions from scholars, researchers, and practitioners representing different disciplines, regions, and intellectual traditions. The chapters collectively explore a broad spectrum of contemporary issues, including sustainable development, circular economy, digital governance, legal transformation, social justice, indigenous knowledge systems, language revitalization, cultural identity, and community resilience. Through theoretical discussions, empirical investigations, case studies, and critical analyses, the contributors provide valuable insights into the changing realities of our modern world.

A central strength of this volume lies in its interdisciplinary nature. The chapters demonstrate that contemporary global challenges cannot be understood through a single disciplinary lens. Instead, they require integrated approaches that recognize the interconnections between society, technology, environment, culture, law, and governance. By fostering dialogue across diverse fields of knowledge, this book contributes to a more comprehensive understanding of the opportunities and challenges facing humanity today.

The editors believe that academic research carries a responsibility not only to advance knowledge but also to inform policy, encourage critical reflection, and contribute to sustainable and equitable development. The studies presented in this volume reflect this commitment by addressing issues of practical relevance while maintaining rigorous scholarly standards.

We express our sincere appreciation to all contributing authors for their dedication, expertise, and valuable scholarly contributions. Their commitment has made this publication possible and has enriched the intellectual quality of the volume. We also

extend our gratitude to the reviewers, advisors, and the publishing team whose guidance and support were instrumental throughout the publication process.

It is our hope that this book will serve as a meaningful resource for researchers, academicians, policymakers, students, and professionals. We trust that the ideas and findings presented in these chapters will inspire further research, foster constructive discussions, and contribute to the development of innovative solutions to contemporary global challenges.

We are honored to present this volume to the academic community and to readers worldwide, and we hope it will encourage continued collaboration, critical inquiry, and the pursuit of knowledge for the betterment of society.

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Table of Contents

Chapter 1:Caste, Gender, Labor Precarity and the Uneven Geography of Circular Supply Chains in the Global South **1**
Dr Anil Bukya and Dr Reena Verma

Chapter 2: Digital Society And Legal Transformation: A Socio-Legal Analysis Of Governance And Justice **18**
Arief Fahmi Lubis

Chapter 3: The Role of Mapuche Literature in the Teaching of Mapuzugun **31**
Javier Aguirre Ortiz

Chapter 4: The Ecology of Loss: Environmental Injustice, Climate Ruin, and the Fragile Politics of Survival in Amitav Ghosh's The Hungry Tide and Octavia E. Butler's Parable of the Sower **49**
Sumana Ghosh

Chapter 5: The Role of Digital Media in Decoding Political Communication Patterns **58**
Shreyas BS

Chapter 6:Strengthening Youth Peace Education through Activity-Based Learning: Insights from Sri Lanka **67**
N.W.M.K.T. Kavinda

Chapter 7: Testimonio, Poverty, and Structural Inequality: A Reading of I, Rigoberta Menchú **81**
I. R. Nadeeka Sandamali Pieris

Chapter 8:Punitive Practices, Attitudes, and Positive Alternatives: An Empirical Study of School Discipline in Sri Lanka **96**
W.A. Pavithra Sanjeevanie and Enoka Randeniya

Chapter 9: Cyberfeminism and Online Gender-Based Violence in India: A Contextual and Critical Analysis **108**
Subhajit Panda

Chapter 10: Bridging the Cognitive–Behavioral Gap: The Contribution of the Buddhism Curriculum to Soft Skill Development in Sri Lankan Secondary Education **129**
Ven. Boralande Samadhirathana, Dr. S. S. Dhahanayake

Chapter 11: From Hashtags to Hostility: Digital Nationalism and Youth Radicalization in Contemporary Conflicts **147**
Mohit Kumar

Chapter 12: Building Sustainable and Climate-Resilient Supply Chains **164**
Dr. Wuppuluru Ramana Rao, Dr. Jayant Isaac

Chapter 13:The Role of Positive Psychology in Enhancing the Mental Health of Special Educators: A Review **177**
Dr. Deepika Sharma

Chapter 14: A Study of AI-Driven Teacher Feedback and Reflective Practices in Enhancing EFL Academic Writing in Higher Education: A Case Study of ESEF Berrechid **184**
Dr. Redouan Baghit

Chapter 15:Globalization and Per Capita Income in Africa: Revealing Inequalities and Aligning Development with the SDG Framework **197**
Isuri Udara Eshwara1, W.M.Y.S Samarasinghe

Chapter 16: Role of Digitalization in Improving Access to Personalized Nutrition in India 211
Palak Pathak and Dr. Anil Bukya

Chapter 17: Synthetic Culture: Generative AI and the Transformation of Social Media Expression 223
Apala Ghosh

Chapter 18: Visualising environmental inequality: An interdisciplinary analysis of environmental vulnerability in the graphic adaptation of Parable of the Sower (2020)
S.Y.S. Karunaratne 238

Chapter 19: Migration, Citizenship and Identity Politics: Understanding the NRC Debate in Assam 246
Sujan Ghosh

Chapter 20: Importance of Labour Relations in Human Resource Management 262
R.Vimala

Chapter 21: The Role of Artificial Intelligence and Technology in Promoting Peace and Reducing Conflict in Digital Society 278
D.H.R. Senevirathne

Chapter 22: The impact of the COVID-19 pandemic on the Sri Lankan tourism hotel industry(with special reference to tourism hotels in the Galle district) 295
Isuri Udara Eshwara1, Weerakoon Mudiyanselage Yasith Srinath Samarasinghe

Chapter 23: Margins of Justice: Intersections of Poverty, Stratification and Displacement in the Struggle for Human Dignity 315
Dr. Abdullah-Al-Monzur Hussain and Tanjuma Mohima

Chapter 24:Spatial Inequality and Access to Education: A Socio-Geographical Analysis of the Digital Divide in Northeast India **337**
Dr. Anuradha Baroowa, Himadri Shekhar Baroowa

Chapter 25: Digital Divide In The Age Of Social Media: Implications For Education And Society **355**
Monika Saigal, Akshay S. Dhengle

Chapter 26 : Artificial Intelligence and Ethics: A Review of Challenges, Risks, and Responsible Practices **368**
Nikita Chetia

Chapter 27 : Poverty in India: Structural Transformation, Multidimensional Challenges, and Policy Pathways **382**
Meghna Mazumdar, Mihika Mazumdar

Chapter 28 : Issues In Poverty Reduction, Environment, And Employment In Van Don District, Quang Ninh Province, Vietnam **405**
Nguyen Bang Nong

Chapter 29 : Narratives of Extremism: Media, Identity, and the Digital Reconstruction of Radicalisation **425**
Aditi Singh

Chapter 30 : Digital Pedagogy And Student Engagement In Higher Education: Bridging The Gap Between Traditional And Online Learning Environments **444**
Puneet Thakur, Sahil

Chapter 31 : Bridging Comprehension and Critique: Exploring EFL Students' Perspectives on the Critical Reading Module in Moroccan ESEF: Berrechid and Beni Mellal as a Case Study **458**
Dr. Redouan Baghit , Dr. Mourad Maimoune , Dr. Ahmed Touhami

Chapter 32: Chapter 32: Voices from the Margins of the Earth: Climate Crisis, Indigenous Epistemologies, and Environmental Justice in Contemporary Literary Discourse **472**
Dr. Asima Baral

Chapter 33 : An Analysis of how the 'Statelessness' of plantation workers influenced their exclusion from Kannangara's Free Education Framework **484**
A.A. Shammi Ishara Amarakoon

Chapter 34 : Gendered Metamorphosis: Female and Male Transformations in Meitei Folklore through Western and Asian Literary Theories **498**
Lukram Ngristin

Chapter 35 :Women Body and Women Self: A Study of Eimear McBride's A Girl is a Half- formed Thing and Nawal El Saadawi's Woman at Point Zero **509**
Dr. Sundus Quyoom

Chapter 36 : From Everyday Objects to Collective Memory: A Study of a Memory Museum in Colombo Public Library, Sri Lanka. **523**
Sandaresee Sudusinghe

Chapter 37: From Caste to Ethnicity: Rethinking Social Justice and State Policy in Contemporary South Asia (India and Sri Lanka) **539**
Saurav sharma

Chapter 38 :Cancel Culture vs Constitutional Morality: Free Speech, Digital Vigilantism, and the Limits of Private Censorship in India **551**
Dr. Deepshikha Bhattacharjee, Madhabendu Chakraborty

Chapter 39 :AI in Higher Education Is 'Not a Student Problem': Reframing Knowledge, Ethics, and Fluency in the Age of AI **567**
Dr Craig J Selby

Chapter 40 :Instagram Tourism and Changing Travel Geography in Northeast India **584**
Pallab Sarma

Chapter 41 :Protecting the Environment: A "Second Order" Deep Ecological Perspective **600**
Surajit Das

Chapter 42: From Plastic to Practice: Why People Fail to Adopt Sustainable Habits **613**
Dharitri Sarmah

Chapter 43: Leveraging Global Partnerships to Enhance the Availability of Drinking Water in the Bamenda III Municipality of the North West Region, Cameroon **622**
Talom Gilbert Tanwie

Chapter 44: The Emotional Landscape in Zubeen Garg's Music: Cultural Identity and Collective Response in Assam **639**
Dr. Deepanjali Baruah

Chapter 45: The Impact of Social Inequality on Social Justice: Strategies for Building a Fair and Inclusive Society **653**
D.H.R. Senevirathne

Chapter 46: Legal Mechanisms for Digital Governance: A Comparative Approach in the Asian Context and Implications for Vietnam **671**
Le Thuong Huyen

Chapter 47: Dynamics of Inequality Identity and Sustainability in Modern Society: An Interdisciplinary Perspective **702**
Vansh Kadiyan

Chapter 48: Living in the Line Rooms: Governance Failure and Spatial Inequality in the Nilgiris Tea Plantation Sector **721**
Sanjeewani Rupasinghe

Chapter 49: Emotional Intelligence As A Catalyst For Career Success **743**
Shabeena Muhammed Sakkariya

Chapter 50: The Male Gaze and Visual Grammar in Sri Lankan Teledrama: A Psychoanalytic Reading of Thathparayak Denna **755**
Hiniduma Teroshanie Dahanayaka

Chapter 51:The Digital Productivity Paradox in Emerging Markets: ICT Deepening, Labor Share Polarization, and Structural Distributional Thresholds **772**
Kallal Rahim

Chapter 52:Ideology and the Making of Sinhala Studies in Sri Lankan Universities: A Comparative Study of Two Phases of Twentieth-Century Sinhala Literary Discourse **794**
Chinthaka Ransinghe

Chapter 53: Analysis of the contribution of CSR practices of bauxite mining companies to the local development of the Boké area in Guinea. **814**
Ibrahima TRAORE

Chapter 54: Borders And Voices: Interrogating The Use Of Code-Switching In Shyam Selvadurai And Janice Pariat **832**
Nitisha Kaja, Dr. Ritu Sharmal

Chapter 55: Generative AI Through an Orientalist Lens : An analytical Study A. P. G. Paddya Umavi1, H. H. Risaka Fernando2 **860**
A. P. G. Paddya Umavi, H. H. Risaka Fernando

Chapter 56:Human–AI Collaboration In Teacher Education: Reimagining Knowledge, Pedagogy, And Future Classrooms For A Digital Society **875**
Ms. Jyotsana, Dr. Ruchi Verma

Chapter 57: Subaltern Feminine Agency and Identity Reconstruction in Mereng **896**
Dr. Shilpisudha Goswami

Chapter 58:Memes as Mirrors and Mediators: Negotiating Suppressed Identities and Social Belonging Among LGBT Adolescents in Culturally and Politically Restrictive Contexts **908**
Jinling You & Indeewari Kanchana Galagama

Chapter 59:Beyond Punishment: The Role of Counselling and Parental Engagement in Student Discipline in Sri Lankan Secondary Schools **928**
U.M. Nilukshini Fernando, H.M.L. Kumari

Chapter 60: Spatio-Temporal Analysis of Urban Heat Island Dynamics in Guwahati City (2010–2025): A Remote Sensing Perspective on Urban Sustainability **951**
Bhargov Phukon , Deepjyoti Bora

Chapter 61:Nature-Based Farming Practices among the Indigenous Community: An Eco-Friendly Perspective from Henanigala South Vedda Village, Sri Lanka **983**
S.M.C.D Jayarathne and C.M.K.N.K Chandrasekara

Chapter 62:Impact of Extreme Heat on Health and Livelihood of Urban Poor Communities: A Systematic Review of Recent Studies **1008**
Md. Sabbir Hasan, Md. Hassan Reza, K. M. Abir Mahmud

Chapter 63:Protecting Role of Mathematics and Statistics in Interdisciplinary Research in Humanities and Social Sciences **1026**
Raju Bhakta, Parth Surendra Bhoyar

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Chapter 1:Caste, Gender, Labor Precarity and the Uneven Geography of Circular Supply Chains in the Global South

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Abstract

The global enthusiasm for circular supply chains and digital transformation tends to project an image of universal progress, cleaner factories, smarter logistics and greener consumption. Yet this image hides something deeply uncomfortable: the gains from circular economy transitions are not shared equally. They are shaped and sometimes sharpened by pre-existing fault lines of caste, class, gender, ethnicity and geography. This chapter examines how the restructuring of global supply chains through sustainability mandates and digitalization intersects with social justice concerns, particularly for marginalized and informal workers in the Global South. Drawing on spatial analysis, intersectional frameworks and empirical evidence from South Asia, Sub-Saharan Africa and Latin America, the chapter argues that without deliberate redistribution of benefits and explicit attention to structural inequalities, the circular economy risks deepening not dissolving the very disparities it claims to overcome. The chapter maps patterns of rural-urban labor migration, gendered precarity in e-waste and recycling sectors, caste-based exclusion from digital supply chain platforms and the invisibility of indigenous livelihoods in sustainability certification systems. It concludes with a framework for spatially just and socially inclusive supply chain transformation.

Keywords: circular economy, social justice, labor precarity, caste, gender, spatial inequality, informal economy, Global South, supply chain sustainability, indigenous communities

1. Introduction: The Promise and the Paradox

When multinational corporations announce ambitious circular economy targets with zero waste by 2030, fully digitalized supply chains, 100 per cent recyclable packaging the headlines tend to read as victories for both business and the planet. And in many ways they are. The scaling of circular models genuinely reduces material waste, lowers carbon intensity, and opens new revenue streams through product-as-a-service and take-back programmes (Geissdoerfer et al., 2017). But narratives of progress, if left unexamined, carry their own silences. Behind the recycling depots in Mumbai's Dharavi, the e-waste yards of Agbogbloshie in Accra, and the garment repair hubs of Mexico City's Tepito market are millions of workers mostly women, mostly from marginalized castes and ethnic minorities, mostly operating without contracts or social protection who already do circular work. They always have. They just haven't been counted, compensated, or included in the policy conversations that claim to champion their activities.

This chapter takes that paradox seriously. It argues that the intersection of global supply chain restructuring, sustainability imperatives, and digital transformation is not socially neutral. Spatial inequalities the uneven geography of who benefits and who bears costs are produced through supply chain decisions every day. Decisions about where to source materials, who to certify as a supplier, which platforms workers must use to access markets, and whose environmental labor counts as circular all carry distributive consequences (Lebaron & Lister, 2015). When those decisions are made without attention to caste hierarchies, gender relations, class structures, or the particular vulnerabilities of tribal and indigenous communities, the circular economy becomes circular only for some.

The theoretical frame used here is intersectional spatial justice a perspective that combines Doreen Massey's (1994) relational geography with Kimberlé Crenshaw's (1989) intersectionality to ask: how do multiple axes of difference produce differentiated spatial experiences of supply chain transformation? This is not merely an academic exercise. As the chapter shows, understanding these patterns is essential to designing supply chain policies and corporate practices that actually deliver on the

promise of sustainability not just for shareholders and brand reputations, but for the workers and communities who are the invisible backbone of the global economy.

2. Mapping the Terrain: Spatial Inequality and Supply Chain Geographies

Geography is never just a backdrop. It is a social product shaped by power relations, investment decisions, colonial histories, and the cumulative weight of policy choices made over decades (Harvey, 2006; Massey, 1994). The geography of global supply chains is no different. It is profoundly unequal, and understanding that inequality is the first step toward addressing it.

2.1 The Urban-Rural Fault Line

One of the most consistent patterns in supply chain geography is the concentration of value-adding activities in urban and peri-urban areas, while extraction, primary processing, and the most hazardous forms of recycling remain concentrated in rural regions or urban peripheries. In India, for example, the formal electronics recycling sector has migrated toward industrial clusters in Noida, Bengaluru, and Hyderabad, while the actual dismantling and material recovery work much of it informal and health-damaging remains concentrated in places like Seelampur in Delhi or the peri-urban outskirts of Pune (Borthakur & Singh, 2017).

Rural communities are particularly vulnerable to this spatial division of labor. Agricultural livelihoods in commodity supply chains cotton in Maharashtra, tea in Assam, cacao in Ghana are systematically undervalued relative to downstream processing and retail. The sustainability premiums that consumers in Europe and North America pay for certified organic or Fairtrade products only rarely trickle down to the farmworkers and smallholder farmers at the base of those chains (Raynolds, 2017). When circular transitions disrupt traditional commodity markets as the growth of synthetic fibers or lab-grown materials may do, rural agricultural communities can be left holding the costs of transition without any of the benefits.

Supply Chain Stage	Typical Location	Dominant Actor	Value Capture (%)
Raw material extraction	Rural / Peripheral	Smallholders, tribal communities	2–5%

Primary processing	Peri-urban	Informal workers, MSMEs	5–12%
Manufacturing / Assembly	Urban industrial clusters	Formal firms	15–25%
Design / R&D / Branding	Global cities	Multinationals	30–50%
Retail / Consumer	Global North cities	Retailers, platforms	20–35%

Table 1: Urban-Rural Disparities in Circular Economy Value Distribution

Sources: Kaplinsky & Morris (2001); UNCTAD (2020)

2.2 Migration, Mobility, and the Labor of Sustainability

Circular supply chains depend on labor mobility in ways that rarely make it into sustainability reports. The waste pickers who collect, sort, and sell recyclable materials in cities like Delhi, Bogotá, or Nairobi are disproportionately rural-to-urban migrants displaced from agricultural livelihoods by drought, land consolidation, or the collapse of local markets (Chikarmane, 2012). They are, in a very real sense, the infrastructure of the circular economy. And yet they remain among the most economically precarious and socially stigmatized workers in urban economies.

The COVID-19 pandemic exposed this vulnerability with brutal clarity. When urban lockdowns shut down informal recycling networks in 2020, millions of waste pickers many of them without documentation, savings, or access to government relief were suddenly without income (Scheinberg et al., 2020). The circular economy had not built resilience for them; it had built dependency on them. This distinction matters enormously for how we evaluate the social performance of circular supply chains.

"Waste pickers in the Global South process an estimated 50-80% of recyclable material in their cities, yet 90% remain outside formal social protection systems. Their labor subsidizes the circular economy while their vulnerability subsidizes our blindness to it." Chikarmane (2012, p. 23)

3. Caste, Class, and the Digitalization Divide

Perhaps no dimension of supply chain inequality is more systematically ignored in mainstream sustainability discourse than caste. And yet caste as a system of hereditary social stratification that determines not just occupational access but physical space, social mobility, and political representation is absolutely central to how circular supply chains function in South Asia and, in different forms under different names, in many other regions of the Global South.

3.1 Caste and Occupational Lock-In

The recycling and waste management sector in India is a case study in how caste hierarchies structure circular economies. Manual scavenging the removal of human waste by hand, often from dry latrines has historically been assigned almost exclusively to Dalit communities, particularly women from specific sub-castes (Coffey & Spears, 2017). Despite being formally prohibited under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act of 2013, this practice continues, and those who have escaped it often find themselves channeled into adjacent informal recycling work that carries similar social stigma and health risks.

The problem is not simply that Dalit workers do this work. The deeper problem is that they are locked into it unable to access the training, certification, or social networks that would allow them to move into higher-value circular economy roles like product design, repair services, or digital platform work. When circular economy platforms emerge like tool libraries, product-as-a-service schemes, or online resale marketplaces they tend to be designed by and for upper-caste, educated, urban users. The interface languages, the identity documentation requirements, the smartphone and internet access assumptions all systematically exclude those at the base of the waste hierarchy (Bhattacharya & Sanyal, 2011).

3.2 Platform Capitalism and Digital Exclusion

Digital supply chain platforms have been celebrated as democratizing forces enabling small suppliers, artisans, and service providers to reach global markets without the intermediaries who historically captured most of the value. And there is real evidence of this in some contexts: platforms like Etsy, Meesho, or M-Pesa have genuinely expanded market access for some previously marginalized producers

(Donner, 2015). But digital inclusion is not the same as digital equity. Access to a platform is only meaningful if users can navigate it effectively, trust it to protect their interests, and actually realize value from it.

In practice, platform participation in circular supply chains is shaped by deep inequalities in digital literacy, device access, connectivity, and algorithmic trust. Workers from lower castes, women, and rural migrants are systematically disadvantaged at each of these points. Algorithmic rating systems, which determine visibility and income on gig platforms, consistently reward workers with higher educational credentials, better digital skills, and urban addresses all attributes correlated with caste and class privilege (Gray & Suri, 2019). The circular economy's digital transformation thus risks not disrupting existing hierarchies but encoding them in code.

Table 2: Barriers to Digital Platform Participation by Social Group

Barrier Category	Dalit Workers	Rural Women	Tribal Communities	Urban Migrants
Smartphone ownership	Low	Very Low	Very Low	Low
Reliable internet access	Low	Very Low	Very Low	Low–Medium
Digital literacy	Low	Very Low	Low	Low
Official ID documents	Medium	Low	Very Low	Low
Language support (platform)	Medium	Low	Very Low	Medium
Algorithm trust score	Very Low	Very Low	Very Low	Low

Relative barriers to circular economy platform participation across marginalized groups in South Asia. *Source: Author's synthesis from Bhattacharya & Sanyal (2011); Gray & Suri (2019); Donner (2015).*

4. Gender, Precarity, and the Feminization of Circular Labor

Gender is the other great structural axis that circular supply chain policies have largely failed to address. Women's labor is foundational to circular economies across the Global South from the sorting and cleaning of recyclable materials, to the repair and resale of garments, to the management of household waste streams and yet this labor is systematically underpaid, under-recognized, and underprotected (Hawkins, 2017; ILO, 2019).

4.1 The Gendered Division of Circular Work

In the informal recycling sector across South Asia, Sub-Saharan Africa, and Latin America, women make up the majority of workers at the most hazardous and lowest-paid points of the value chain. In India, women waste pickers sort through wet and dry waste with bare hands; in Ghana's Agbogbloshie e-waste site, women and girls perform acid stripping of circuit boards, exposing themselves to neurotoxic heavy metals (Grant et al., 2013). Meanwhile, men tend to dominate the higher-value functions of collection, aggregation, and trading activities that require mobility, access to transport, and the social networks that accrue more readily to men in patriarchal social systems.

This gendered division of labor is not natural or inevitable. It is produced by the interaction of patriarchal norms, spatial constraints on women's mobility, discriminatory access to credit and technology, and the systematic devaluation of care-associated work which recycling and waste management culturally resembles (Federici, 2012). Circular supply chain programs that ignore these dynamics will replicate them. Those that actively address them by designing women-led cooperatives, mobile-accessible income tracking tools, and participatory value chain governance can genuinely shift outcomes.

CASE STUDY: SWaCH Cooperative, Pune, India
The SWaCH (Solid Waste Collection and Handling) cooperative in Pune represents one of the most successful examples of integrating gender justice into circular supply chains. Founded in 2008, SWaCH is a wholly-owned cooperative of waste pickers — 90% of whom are women from Dalit and other marginalized communities — that

holds a formal contract with the Pune Municipal Corporation for door-to-door waste collection and segregation. Members earn stable incomes from waste fees and material sales, have access to occupational health insurance, and participate in cooperative governance. By 2020, SWaCH had 3,500 members processing over 700 tonnes of waste per day, demonstrating that formalization and gender inclusion are not trade-offs with operational efficiency. Source: Chikarmane (2012); Pune Municipal Corporation (2020).

4.2 Care Work, Domestic Recycling, and the Invisible Circular Economy

Beyond the formal and informal recycling sectors, there is an even more invisible dimension of women's circular labor: the domestic work of repair, reuse, and resourcefulness within households. In low-income households across the Global South, it is predominantly women who manage the careful reuse of food scraps, the repair of clothing, and the creative repurposing of containers and materials. This is circular economy activity in the most literal sense and it has never been counted, compensated, or celebrated in any corporate sustainability report (Federici, 2012).

The omission matters because it shapes policy. Circular economy programs designed without understanding domestic circular practices miss an enormous reservoir of existing knowledge and capacity. They also risk designing interventions that actually increase women's labor burden asking households to sort waste into six streams, for example, without reducing any of the other demands on women's time. A genuinely feminist circular supply chain policy would begin by auditing who currently does circular work, whose labor subsidizes sustainability outcomes, and how those burdens can be more equitably shared.

5. Indigenous and Tribal Communities: Sustainability Without Sovereignty

Indigenous and tribal communities occupy a deeply paradoxical position in global sustainability narratives. They are celebrated as custodians of traditional ecological knowledge, as models of sustainable living, and as the front line of environmental protection particularly in the forests, watersheds, and biodiversity hotspots that underpin global supply chains for agricultural commodities, timber, minerals, and

carbon credits. And simultaneously, they are among the most systematically dispossessed, excluded, and violated communities in the world (Li, 2010; Tsing, 2015).

5.1 Green Grabbing and the Circular Economy Frontier

The concept of 'green grabbing' the appropriation of land, resources, or labor in the name of environmental sustainability has emerged as a critical lens for understanding how circular economy transitions can harm indigenous communities (Fairhead et al., 2012). When multinational corporations or national governments designate forests as carbon sinks, establish biodiversity conservation zones, or certify land for 'sustainable' biomass production, they frequently do so without free, prior, and informed consent from the indigenous and tribal communities who have managed those landscapes for generations.

The circular economy amplifies this risk in several specific ways. Demand for critical minerals lithium, cobalt, rare earth elements that power the digital infrastructure of smart supply chains is driving extraction in regions with high concentrations of indigenous populations in South America, the Democratic Republic of Congo, and parts of Southeast Asia (Sovacool et al., 2020). The renewable energy transition, which underpins the sustainability claims of digitalized supply chains, similarly requires land for solar farms and wind installations land that is often communally held by tribal communities. Biomass supply chains for bioplastics and biofuels compete directly with food systems and sacred lands.

CE Sector	Key Mineral / Resource	Indigenous Impact	Key Affected Region
EV Batteries	Lithium, cobalt	Land displacement, water depletion, cultural site destruction	Bolivia, DRC, Philippines
Solar Energy	Silicon, silver, land	Agricultural displacement, loss of grazing lands	India (Rajasthan), Chile

Bioplastics	Sugarcane, cassava	Food insecurity, deforestation of ancestral forests	Brazil, Indonesia
Wind Energy	Land (wind corridors)	Sacred site desecration, community division	Oaxaca (Mexico), India
Carbon Credits	Forest land	Land tenure disputes, exclusion from benefit sharing	Congo Basin, Amazon

Table 3: Indigenous Community Impacts Across Circular Supply Chain Sectors

Documented impacts of circular economy sectors on indigenous and tribal communities.

Sources: Sovacool et al. (2020); Fairhead et al. (2012); Li (2010).

5.2 Traditional Knowledge and the Certification Trap

Indigenous communities also face a specific form of exclusion through sustainability certification systems. Standards bodies like the Forest Stewardship Council (FSC), Rainforest Alliance, and various organic certification schemes require complex documentation, third-party auditing, and language proficiency in dominant European languages all prerequisites that are structurally difficult for tribal communities to meet, not because of any lack of sustainability practice, but because of how the standards were designed (Li, 2010). The result is that indigenous communities who have practiced circular, sustainable land management for centuries find themselves excluded from markets that certify exactly the practices they already embody.

This is not simply an administrative inconvenience. It has real economic consequences: access to premium markets, long-term supply contracts, and corporate sourcing programs increasingly depends on certification. Communities that cannot achieve it are pushed toward the commodity end of supply chains, where prices are lowest and competition is highest. Their traditional ecological knowledge which global biodiversity frameworks increasingly recognize as invaluable generates no economic return for the communities that created and maintain it (Tsing, 2015).

6. Health, Education and Well-Being: The Spatial Politics of Capability

Sen's (1999) capability approach offers a powerful lens for evaluating the social outcomes of supply chain transformation: what matters is not just income, but the substantive freedoms people have to live lives they have reason to value. Health and education are foundational capabilities and their spatial distribution closely tracks the patterns of supply chain inequality described above.

6.1 Occupational Health in Circular Sectors

The health costs of circular economy work fall disproportionately on marginalized workers. E-waste processing exposes workers to lead, mercury, cadmium, and polybrominated diphenyl ethers chemicals associated with neurological damage, reproductive harm, and cancer (Grant et al., 2013). Informal textile recycling involves exposure to dyes, solvents, and fine textile fibers. Waste picking involves contact with biohazardous materials, sharps, and toxic residues. These exposures are not random they follow the contours of caste, class, gender, and geography with remarkable consistency.

What is perhaps most striking is how little of this is reflected in corporate sustainability reporting. The supply chain health impacts that appear in ESG reports are typically those of direct employees in formal Tier 1 facilities — the workers with contracts, the workers whose working conditions can be audited. The informal, subcontracted, and spatially dispersed workers who actually do much of the circular economy's most hazardous work remain outside the frame of accountability (LeBaron & Lister, 2015).

6.2 Educational Exclusion and Intergenerational Precarity

Education is the most powerful determinant of supply chain mobility the capacity to move from low-value, high-exposure work toward higher-skilled, better-compensated roles in circular economy sectors. And educational access is profoundly unequal across all the dimensions discussed in this chapter. Children of waste pickers often accompany their parents to work rather than attending school partly from economic necessity, partly from the social stigma attached to their families' occupations, and partly from the absence of school infrastructure in the urban peripheries where many informal recycling communities live (Coffey & Spears, 2017).

This creates a mechanism of intergenerational reproduction of precarity. The children of Dalit waste pickers in Delhi, informal garment workers in Dhaka, or artisanal miners in Katanga are statistically far more likely than their peers to end up doing similar work not because of any inherent limitation, but because of the accumulated spatial disadvantages of where they were born, what schools were available to them, and what social networks they could access. Circular supply chain transformation, if it does not actively disrupt this reproduction, will simply carry it forward into new forms.

7. Toward Spatially Just Circular Supply Chains: A Framework

Having mapped the problem across multiple dimensions spatial, intersectional, sectoral the chapter now turns to what a more just alternative might look like. This is not a utopian exercise. The framework proposed here is grounded in existing practices, emerging policy instruments, and the genuine gains that have been achieved in specific contexts. It is organized around five principles.

Principle 1: Recognize and Formalize Existing Circular Labor

Before designing new circular economy programs, policymakers and corporations must inventory who is already doing circular work. This means mapping informal recycling networks, home repair economies, and indigenous land stewardship practices and treating them as assets to build on rather than deficits to replace. Formalization should be driven by workers' needs, not administrative convenience; the SWaCH cooperative model offers one template.

Principle 2: Design for Intersectionality, Not the Average User

Digital platforms, certification schemes, and circular economy services must be co-designed with the communities they claim to serve. This requires disaggregated data on who uses what, who is excluded and why, and how design choices encode existing inequalities. Universal design principles accessibility, multilingual interfaces, low-bandwidth functionality are a starting point, but genuine co-design goes further.

Principle 3: Spatialize Extended Producer Responsibility

Extended Producer Responsibility (EPR) schemes which make manufacturers responsible for end-of-life product management have significant potential as a lever for redistributing circular economy gains. But they need to be spatially targeted: EPR funds should be explicitly directed toward the informal recycling communities in the

regions where products are used and discarded, rather than channeling resources exclusively toward formal sector facilities in higher-income areas.

Principle 4: Center Free, Prior, and Informed Consent in Resource Supply Chains

Any supply chain that sources from territories with indigenous or tribal populations must embed FPIC principles as a non-negotiable operational standard not a certification checkbox. This means genuine consultation before operations begin, binding benefit-sharing agreements, and the right to say no without economic penalty. Blockchain and digital traceability tools, while imperfect, can support this if designed with community sovereignty in mind.

Principle 5: Invest in Spatial Capabilities, Not Just Market Access

Market access without capability is a trap. Supply chain development programs must pair market linkage initiatives with investments in health infrastructure, education, digital literacy, and social protection in the communities where they operate. This is not charity it is the minimum condition for the kind of labor stability and community trust that supply chains actually depend on for long-term resilience.

Dimension of Justice	Policy / Practice Lever
Recognize informal circular labor	Cooperative formalization, legal recognition, occupational health protection
Intersectional platform design	Co-design with marginalized users, disaggregated data, algorithmic accountability
Spatial redistribution of EPR funds	Ring-fence EPR revenues for informal sector communities in product-use regions
Indigenous sovereignty in sourcing	FPIC as operational standard; community-controlled benefit sharing
Capability investment	Education, health, digital literacy, social protection in supply chain communities

Gender-responsive value chain analysis	Audit unpaid circular labor; design programs that reduce, not increase, women's burden

Table 4: Framework for Spatially Just Circular Supply Chain Transformation

Integrated framework for spatially just and socially inclusive circular supply chain transformation. *Source: Author.*

8. Conclusion: Circularity Without Justice Is Not Sustainability

This chapter has traced a consistent pattern across a diverse range of contexts: the transition toward circular, digitalized, and sustainable supply chains is reproducing and in some cases intensifying existing social inequalities. It is doing so not through malice, but through neglect through a failure to ask who does circular work, who bears circular burdens, and who captures circular value. The invisible workers of the circular economy the waste pickers, the informal repairers, the tribal communities managing biodiversity hotspots, the women managing resource-scarce households are simultaneously the moral foundation and the practical infrastructure of global sustainability. And they are being left out.

The scale of this problem should not paralyze us. Across the examples discussed in this chapter from SWaCH in Pune to indigenous benefit-sharing models in Latin America, from feminist platform design principles to spatially targeted EPR policies there are genuine demonstrations that it is possible to do better. The tools exist. The knowledge exists. What has been lacking is the political will to center justice as a design criterion rather than an afterthought.

The book this chapter belongs to Reimagining Global Supply Chains through Sustainability, Digitalization, and Circular Economy carries an implicitly ambitious word: reimagining. Reimagination is not incremental. It requires genuinely new mental models, new metrics, and new governance structures. It requires supply chain managers who know what caste is and how it operates. It requires digital platform designers who can read a map of spatial inequality. It requires sustainability standards bodies willing to redesign from the ground up with marginalized communities in the room. And it requires researchers including the readers of this book willing to ask not

just whether supply chains are becoming more sustainable, but sustainable for whom, by whose labor, and at whose expense.

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Chapter 2: Digital Society And Legal Transformation: A Socio-Legal Analysis Of Governance And Justice

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Abstract

This chapter examines the transformation of law in the context of the digital society, focusing on the relationship between governance and justice from a socio-legal perspective. The rapid expansion of digital technologies, including artificial intelligence, big data, and platform-based ecosystems, has significantly reshaped legal institutions, regulatory frameworks, and social interactions. While these developments offer new opportunities for efficiency and connectivity, they also generate complex challenges related to accountability, inequality, and access to justice. This study employs a qualitative socio-legal approach by integrating doctrinal legal analysis with critical social theory. The theoretical framework draws on the works of Habermas regarding communicative action and the public sphere, Foucault's concept of power and surveillance, and Bourdieu's theory of social structure and symbolic power. These perspectives are used to analyze how digital governance reshapes power relations between the state, private technology corporations, and citizens. The chapter highlights three key issues: first, the emergence of algorithmic governance, where decision-making processes are increasingly automated; second, the rise of digital inequality and algorithmic bias that may reinforce existing social disparities; and third, the transformation of access to justice in digital environments, particularly in developing contexts where regulatory capacity remains limited. The findings suggest that legal transformation in the digital era is not merely a technical or regulatory adjustment, but a broader socio-political process involving power redistribution and institutional change. Therefore, a socio-legal approach is essential to understanding how justice can be maintained in increasingly digitized societies. This chapter contributes to interdisciplinary scholarship by proposing a more critical and inclusive framework for analyzing digital governance and legal transformation in the twenty-first century.

Keyword: Digital Society, Legal Transformation, Digital Governance, Socio-Legal Analysis, Justice, Algorithmic Bias

Introduction

The development of digital society over the past two decades has transformed how individuals interact, work, and participate in social and political life. This transformation is driven by digital technologies such as artificial intelligence, big data, and digital platforms, which operate not only as communication tools but as infrastructures that structure governance and decision-making. In this context, law is not merely a normative system but a social institution shaped by technological change and shifting power relations, raising the central question of how these transformations reconfigure legal functions and outcomes.From a socio-legal perspective, law is embedded in social structures and must be analyzed through its interaction with power, technology, and inequality. Accordingly, this article examines how digital technologies reshape legal processes through specific mechanisms data extraction, algorithmic decision-making, and platform governance and how these mechanisms produce concrete legal consequences in regulation, implementation, and access to justice. These transformations are not neutral, as they generate new inequalities, including the digital divide, algorithmic bias, and the concentration of power in global technology corporations.

Habermas argues that an ideal public sphere enables equal rational participation (Habermas, 1989, p. 27), yet digital platforms restructure this sphere through commodification and algorithmic filtering, limiting equal access to information. Similarly, Foucault's concept of dispersed surveillance (Foucault, 1977, p. 201) becomes operational in data-driven monitoring systems that shape behavior and regulatory control. Bourdieu's notion of capital (Bourdieu, 1986, p. 241) further explains how digital access and literacy function as resources that determine legal inclusion and exclusion.

Therefore, legal transformation in digital society is a structural process in which law is reconfigured through identifiable socio-technical mechanisms that redistribute power and reshape access to justice. A socio-legal approach is thus required not only to interpret these changes, but to demonstrate how theory explains the linkage between technological systems and observable legal inequalities.

Literature Review

1. Digital Society and Social Transformation

Scholars widely agree that the rise of digital technologies has fundamentally reshaped social structures. Castells describes modern society as a *network society*, where digital networks constitute the primary mode of organization across economic, political, and cultural domains (Castells, 2010, p. 21). Social interactions are no longer confined to

physical spaces but increasingly occur within global and decentralized digital environments.

However, this transformation is not uniform or neutral. Zuboff introduces the concept of *surveillance capitalism*, arguing that digital platforms extract and commodify personal data, creating new forms of power asymmetry (Zuboff, 2019, p. 8). Thus, digital society simultaneously produces innovation and new inequalities.

2. Socio-Legal Perspectives on Law

From a socio-legal perspective, law is not merely a set of formal rules but a social institution shaped by power relations and cultural contexts. Friedman identifies three components of legal systems: structure, substance, and legal culture (Friedman, 2007, p. 15). This framework enables a broader understanding of how law operates in practice.

Similarly, Cotterrell argues that law must be understood within its broader social and institutional environment, where it both reflects and constructs social order (Cotterrell, 2006, p. 42). This perspective is particularly relevant in digital society, where legal systems must adapt to rapid technological change.

3. Digital Governance and Regulatory Shifts

Recent literature highlights that governance in the digital era is no longer state-centered. Technology companies and digital platforms now play a crucial role in regulating social behavior. Lessig's influential thesis states that "code is law", meaning that digital architecture itself functions as a regulatory mechanism (Lessig, 2006, p. 5).

This shift from traditional state regulation to multi-actor governance raises critical issues regarding accountability, legitimacy, and transparency in digital environments.

4. Justice, Inequality, and Algorithmic Bias

Justice has become a central concern in digital society. Automated decision-making systems increasingly shape outcomes in areas such as healthcare, employment, and criminal justice. Obermeyer et al. demonstrate that algorithmic systems may reproduce racial bias, leading to systemic inequality (Obermeyer et al., 2019, p. 447).

Benjamin further argues that technological systems often embed and reinforce existing social hierarchies through what she calls *technological bias* (Benjamin, 2019, p. 102). This indicates that technology is not neutral but socially constructed.

5. Research Gap

The literature reveals several important gaps:

1. Existing studies on digital law are predominantly normative and technical, lacking socio-legal depth.

2. Limited integration between power theory (Foucault, Bourdieu) and digital regulation studies.
3. Insufficient attention to Global South perspectives in digital governance debates.
4. Lack of comprehensive studies linking algorithms, law, and social justice.

6. Research Positioning

This chapter positions itself as an interdisciplinary socio-legal contribution that connects digital transformation with legal change and social justice. It moves beyond purely doctrinal approaches by emphasizing law as part of broader power relations within digital society.

Research Methodology

This study employs a qualitative approach with a socio-legal research design, which views law not only as a normative system but also as a social phenomenon shaped by power structures, institutions, and technological developments. This approach is chosen because legal transformation in digital society cannot be fully understood through doctrinal analysis alone; it requires an understanding of the surrounding social context in which law operates.

In socio-legal studies, law is understood as part of a broader social system that interacts with economic, political, and cultural factors. Friedman argues that the legal system consists of three main elements, namely structure, substance, and legal culture, which mutually influence each other in social practice (Friedman, 2007, p. 17). Therefore, changes in digital society must be analyzed through these three dimensions in order to understand how law functions in social reality.

In addition, this research also applies a critical socio-legal analysis that highlights power relations in the implementation of law in the digital era. Foucault explains that modern power operates in dispersed forms through disciplinary mechanisms and surveillance that are not always directly visible (Foucault, 1977, p. 187). In the context of digital society, such surveillance emerges through data-driven systems, algorithms, and digital platforms that shape social behavior.

This approach is further strengthened by the concept of legal consciousness, which refers to how individuals understand, interpret, and respond to law in everyday life. Ewick and Silbey emphasize that law does not only exist within formal institutions but also within the dynamic legal consciousness of society (Ewick & Silbey, 1998, p. 45).

The data in this study are secondary data obtained through literature review of books, academic journals, and policy documents related to digital governance, legal transformation, and socio-legal theory. The analysis is conducted using

descriptive-analytical and interpretive methods, with the aim of identifying patterns of legal change in digital society and their implications for social justice.

Thus, this methodological approach allows the research not only to describe legal changes in formal terms but also to understand how law operates within social structures shaped by digital technology and global power relations.

Discussion

1. Digital Society Transformation and the Shift of Legal Paradigms

The transformation toward a digital society reshapes how law is produced, interpreted, and applied by relocating regulatory processes into digitally mediated environments. In this article, **digital society** is defined as a socio-technical order in which social interaction, economic exchange, and governance are structured through data-driven infrastructures. This raises the analytical question: *how does this shift from territorial to networked interaction alter the locus and authority of law?*

Castells' concept of the network society explains that social organization increasingly follows information flows rather than territorial boundaries (Castells, 2010, p. 345). Operationally, this shift can be observed in platform-based rule-making, where private terms of service, content moderation systems, and algorithmic ranking function as de facto regulatory instruments. Consequently, law moves from ex ante formal legislation toward hybrid forms of regulation embedded in digital infrastructures.

However, Friedman's view that law is embedded in social and cultural structures (Friedman, 2005, p. xx) explains the persistence of institutional inertia. The mechanism at work is a **structural lag**: while digital practices evolve rapidly, legal norms adapt incrementally through formal processes. Empirically, this is reflected in delayed regulatory responses to issues such as data protection or platform accountability. Thus, law becomes reactive, not merely in a descriptive sense, but as a consequence of institutional design that cannot match the pace of socio-technical change.

2. Digital Governance and the Reconfiguration of Power

Digital governance refers here to the distribution and exercise of regulatory authority through digital infrastructures involving both state and non-state actors. The key analytical question is: *through what mechanisms do digital platforms acquire regulatory power comparable to the state?*

Foucault's concept of dispersed power (Foucault, 1977, p. 261) becomes operational through continuous data collection, behavioral tracking, and algorithmic normalization. These mechanisms produce forms of control without direct coercion, shaping user

behavior through design and prediction. Zuboff's notion of surveillance capitalism (Zuboff, 2019, p. 57) further specifies the economic logic: behavioral data is extracted, processed, and monetized, turning governance into a by-product of market operations.

The legal consequence of these mechanisms is a reconfiguration of sovereignty. Platforms exercise rule-making (terms of service), adjudication (content moderation decisions), and enforcement (account suspension), which are traditionally state functions. This produces a measurable shift: states retain formal authority but lose effective control in transnational digital spaces. Thus, digital governance is not merely shared but structurally redistributed through socio-technical systems.

3. Algorithms, Inequality, and the Problem of Digital Justice

Algorithmic systems are defined here as decision-making processes that rely on automated data processing to classify, predict, or recommend outcomes. The analytical question is: *how do algorithms translate existing social inequalities into legally relevant outcomes?*

O'Neil's concept of "black boxes of inequality" (O'Neil, 2016, p. 32) can be operationalized through three mechanisms: biased training data, opaque decision rules, and feedback loops that reinforce prior outcomes. These mechanisms transform social bias into systemic outcomes, for example in risk assessment tools, content visibility, or access to services.

Bourdieu's theory of social reproduction (Bourdieu, 1986, p. 79) explains why these patterns persist. Algorithms function as symbolic structures that encode and reproduce existing distributions of capital (economic, social, and cultural) in automated form. The legal consequence is not abstract inequality, but differential access to rights, opportunities, and remedies. Therefore, digital injustice emerges not from technological error but from structured socio-technical processes, requiring legal analysis that connects data practices to distributive outcomes.

4. Transformation of Access to Justice in the Digital Era

Access to justice in this context is defined as the ability of individuals to effectively use legal institutions to claim and enforce rights. The analytical question is: *does digitalization expand or restructure access, and for whom?*

Digital legal systems such as e-courts and online dispute resolution operate through mechanisms of automation, standardization, and remote access. These mechanisms reduce cost and increase efficiency, which empirically improves access for certain

users. However, they simultaneously introduce barriers related to digital literacy, technological access, and procedural understanding.

UNDP's framework (UNDP, 2020, p. xx) emphasizes inclusivity, while Galanter's distinction between "repeat players" and "one-shotters" (Galanter, 1974, p. 36) explains differential capacity to benefit from legal systems. In digital settings, repeat players (e.g., corporations) can leverage data, legal expertise, and technological resources, while one-shotters face structural disadvantages. The legal consequence is a redistribution of procedural advantage, where efficiency gains coexist with new forms of exclusion.

5. State, Platforms, and the Crisis of Legal Regulation

The central question in this section is: *why do existing legal frameworks struggle to regulate global digital platforms?*

Digital platforms operate across jurisdictions, using technical architectures that fragment regulatory reach. Habermas' concept of the public sphere (Habermas, 1996, p. 103) becomes constrained as communication is mediated by algorithmic systems driven by commercial logic. Teubner's notion of "global private regimes" (Teubner, 1997, p. 91) provides the analytical bridge: platforms create normative orders rules, enforcement, dispute resolution without democratic legitimacy.

The mechanism here is **jurisdictional disalignment**: legal authority remains territorially bounded, while digital activity is transnational and infrastructure-based. The observable legal consequence is a legitimacy deficit, where rules governing public discourse and behavior are effectively set by private actors without corresponding accountability structures.

6. Socio-Legal Synthesis: Toward a New Model of Digital Justice

The preceding analysis demonstrates that legal transformation in digital society operates through identifiable socio-technical mechanisms that redistribute power and reshape legal outcomes. A socio-legal approach, therefore, is not merely declarative but analytical: it links theory to observable processes and consequences.

Conceptually, law in digital society can be understood as:

a. a product of socio-technical interaction, where norms are embedded in code and platforms;

b. an instrument of power distribution, mediated through data and algorithms;

c. a mechanism for structuring access to justice under conditions of inequality.

From this analysis, a new model of digital justice must address three operational dimensions:

a. substantive justice, by evaluating distributive effects of algorithmic systems;

b. procedural transparency, by making decision-making processes accountable and reviewable;

c. adaptive regulation, by aligning legal frameworks with the pace and scale of technological change.

Thus, the evolution of law is not simply normative but structural: law must be reconfigured to intervene in the mechanisms data practices, algorithmic systems, and platform governance that produce inequality within the digital ecosystem.

Implications And Policy Recommendations

1. Theoretical Implications

This study contributes to socio-legal scholarship by reinforcing the argument that law in the digital era cannot be understood solely as a formal normative system, but must be analyzed as a socially embedded and technologically mediated structure of power and governance.

a. the findings extend classical socio-legal theory by demonstrating that legal transformation is increasingly shaped by non-state digital actors, particularly platform corporations that function as regulatory entities. This challenges traditional state-centric legal theory and supports the emergence of post-sovereign legal orders.

b. the study strengthens the relevance of Foucault's concept of power by showing how algorithmic systems operate as disciplinary mechanisms that govern individual behavior through data extraction, surveillance, and predictive control. In this sense, digital governance represents a new form of "algorithmic power" embedded within everyday social interactions.

3. the integration of Bourdieu's theory of social reproduction highlights that algorithms are not neutral instruments but may reproduce existing social inequalities in automated forms. This expands the concept of symbolic power into the realm of computational governance (*Implication:* Socio-legal theory must evolve toward a digital socio-legal paradigm that accounts for technological mediation of law and power).

2. Legal and Regulatory Implications

The transformation of society into a digital ecosystem presents significant challenges for existing legal frameworks, which are often territorially bound and institutionally rigid.

a. traditional legal systems struggle to regulate transnational digital platforms that operate beyond national jurisdiction. This creates a regulatory gap where corporations exercise de facto governance without equivalent legal accountability.

b. the rise of algorithmic decision-making in public and private sectors introduces issues of transparency, explainability, and accountability. Many legal systems lack adequate instruments to audit or challenge automated decisions that affect fundamental rights.

c. digitalization of justice systems (e-courts, online dispute resolution) improves efficiency but risks deepening inequality if digital access remains uneven. This creates a tension between procedural modernization and substantive justice (*Implication:* Legal systems require urgent adaptation to address jurisdictional fragmentation, algorithmic accountability, and digital inequality).

3. Policy Recommendations for Digital Governance

Based on the analysis, several policy directions are proposed to ensure that digital transformation aligns with principles of justice and accountability.

a. Development of Algorithmic Accountability Frameworks

Governments should establish legal mechanisms requiring transparency in algorithmic systems used in public administration and private sector decision-making. This includes mandatory impact assessments and independent audits of high-risk AI systems.

b. Strengthening Digital Rights Protection

Digital rights should be formally recognized as an extension of fundamental human rights, including:

1) right to data privacy
2) right to explanation of automated decisions
3) right to digital due process

c. Enhancing Multi-Stakeholder Digital Governance

Given the transnational nature of digital platforms, governance should involve a multi-actor approach including:

1) state institutions
2) private technology companies
3) civil society organizations
4) academic experts

This ensures that regulatory frameworks are not monopolized by any single actor.

d. Capacity Building for Digital Legal Systems

States must invest in:

1) digital literacy programs for citizens
2) judicial training on digital evidence and AI systems
3) technological infrastructure for equitable access to justice

Implication: Effective digital governance requires not only legal reform but also institutional and societal capacity development.

4. Societal Implications.

The transformation toward a digital society has profound consequences for social structure and justice relations.

First, digital inequality becomes a new axis of social stratification. Individuals with limited access to digital infrastructure or literacy face exclusion from legal and administrative systems, reinforcing existing socio-economic disparities.

Second, algorithmic governance alters the relationship between citizens and the state, shifting interactions from human-mediated processes to automated systems. This may reduce transparency in decision-making and weaken public trust in legal institutions.

Third, the commodification of personal data under surveillance capitalism transforms individuals into data subjects whose behavior is continuously monitored and monetized, raising serious ethical and legal concerns.

Implication: Digital transformation reshapes not only legal systems but also the foundations of social justice and citizenship.

5. Toward a Justice-Oriented Digital Legal Framework

In response to the challenges identified above, this study proposes the development of a justice-oriented digital legal framework grounded in three core principles:

a. Transparency

All algorithmic and digital governance systems must be open to scrutiny to ensure accountability and public trust.

b. Inclusivity

Digital legal systems must ensure equal access regardless of socio-economic status, geography, or digital literacy levels.

c. Accountability

Both state and non-state actors involved in digital governance must be subject to clear legal responsibility mechanisms.

This framework emphasizes that digital transformation should not only prioritize efficiency and innovation, but also safeguard fundamental principles of justice, equality, and human dignity.

Final implication: Law in the digital era must evolve into a normative-ethical and socio-technical system that balances innovation with justice-oriented governance.

Conclusion

This chapter has examined the transformation of law within the context of the emerging digital society, with particular emphasis on governance and justice from a socio-legal perspective. The analysis demonstrates that digital transformation is not merely a technological shift, but a profound reconfiguration of legal, social, and political orders.

The study shows that law is increasingly shaped by digital infrastructures and non-state actors, particularly global technology platforms that function as regulatory powers beyond traditional state jurisdiction. This development signals a shift from state-centered legal systems toward hybrid governance structures, where authority is distributed across multiple actors, including corporations, algorithms, and transnational networks.

Furthermore, the discussion highlights that algorithmic systems and data-driven governance introduce new forms of inequality and control. While digitalization enhances efficiency in legal and administrative processes, it simultaneously raises critical concerns regarding transparency, accountability, and fairness. Algorithmic bias and surveillance mechanisms may reproduce or even intensify existing social inequalities, thereby challenging the foundational principles of justice.

From a socio-legal standpoint, the chapter emphasizes that law cannot be understood in isolation from its social and technological environment. Instead, law operates as a dynamic system embedded within broader structures of power, communication, and

social relations. In this regard, classical socio-legal theories remain highly relevant, yet require adaptation to account for the rise of digital governance and algorithmic decision-making.

The findings of this chapter suggest that ensuring justice in the digital era requires more than regulatory updates. It demands a fundamental rethinking of legal principles to incorporate transparency, inclusivity, and accountability as core normative foundations of digital governance. Without such transformation, there is a risk that digitalization will deepen existing inequalities and weaken public trust in legal institutions.

In conclusion, the chapter argues that the future of law lies in its ability to evolve into a justice-oriented digital legal framework that balances technological innovation with the protection of human rights and social equity. The socio-legal approach adopted here underscores the necessity of interdisciplinary engagement in understanding and governing the complex realities of the digital society.

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Chapter 3: The Role of Mapuche Literature in the Teaching of Mapuzugun

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Abstract

The relationship between Mapuzugun literature and language learning is complex and deeply rooted in the historical context of colonization. The written history of Mapuzugun, which began as a tool for evangelization, has been marked by a tension between preservation and assimilation. Despite this, Mapuche literature has the potential to play a significant role in the revitalization of the language, particularly when connected to the values and spirituality inherent to Mapuche culture. This chapter explores the ways in which Mapuche literature can be used as a resource for learning Mapuzugun, highlighting the work of authors such as María Isabel Lara Millapan and Manuel Manquilef, who have made significant contributions to the development of Mapuche literature and language education. The use of song, known as "ülkantun," is also discussed as a powerful tool for linguistic revitalization and learning. Ultimately, the chapter argues that the autonomy of Mapuche literature is crucial for its development and that it should not be reduced to a mere tool for language learning. Instead, it should be valued and recognized as a vital part of Mapuche culture and identity, with the potential to promote a deeper understanding and appreciation of the language and its significance in the context of Mapuche history and spirituality. The methodology of this research consisted of a systematic review of Mapuche literature related to the teaching and learning of Mapuzugun, whether directly through the development of teaching materials or indirectly from a motivational perspective.

Key words: Mapuche literature, Mapuzugun, Language revitalization, Endangered Languages, Language Learning

1 . Introduction

The history of Mapuzugun, and particularly that of its writing system, lends a unique character to the question of the relationship between literature and the teaching of Mapuzugun. The written history of what was once considered "the language spoken throughout the Kingdom of Chile" (Valdivia, 1606), "the general language of Chile" (Febrés, 1765), or Chilidugu (Havestadt, 1777) began as something foreign or, if you will, alienating: the primary purpose of the first publications in Mapuzugun was to evangelize, or to teach the language to missionaries: "I set about compiling a grammar and a vocabulary and confessional in their language, so that the ministers of the Gospel might learn it" (Valdivia, 1606). Or, as Fray Francisco Xavier Parra states: "The printing of his Grammar of the Chilean Language, for the easier conversion and conquest of those souls" (Febres, 1765). Even in the texts presented as dialogues, which could be read as authentic, the author makes his purpose explicit: "This Dialogue was written solely to practice composition and to practice speaking familiarly in this language: here I will include a short Coyaghtun, or Reasoning, as they use it in their Parliaments and other public functions." (Febres 1765, p. 145). The argument in favor of the Guaraní missions as exemplary, on the other hand, leaves little room for doubt regarding the purpose of such a dialogue, which is to preach the benefits of evangelization.

If, during the period that Villena (2017) calls the "missionary period" (1606–1894), the evangelizing purpose is what drives and determines publications in Mapuzugun and about Mapuzugun (catechisms, commandments, sermons, grammars), during the "ethnographic period" (1895–1979) following the same periodization— the Araucanists, although the evangelizing purpose remained in force through religious figures such as Augusta or Moesbach, focused on compiling the testimonies of a culture they considered on the brink of extinction, something evident in titles such as *Las últimas familias araucanas* (the last Araucanian families) (Guevara, 1912).

The writing of Mapuzugun, therefore, has been associated from the outset with colonization and evangelization, and has served as a tool linked to the desire to eradicate the Mapuche Nation's traditional way of life, its *feyentun* or spirituality, their customary law or azmapu, their territory, and, finally, their language as well which Moesbach, according to then-Bishop Hart, had already declared dead, considering his book *Idioma Mapuche* (1962, p. 13) a reworking of the Augusta grammar (1903) "an epitaph":

> It will not be a revision of the book by Rev. Félix Kathan of Augusta, but rather a reworking or, as Rev. Ernesto jokingly tells me in a letter, an "epitaph," just as one is usually placed on the tomb of the deceased, since the Araucanian

> language will no longer be spoken in a few years' time, as has happened with so many other languages.

For all these reasons, it is not surprising that the text has aroused such reluctance —and in some cases continues to arouse among various Mapuzugun speakers. Even such notable examples as the *Küme dungu* publishing house (1983–1998), whose publications have frequently been used as Mapuzugun learning materials, as José Miguel Ortiz in the presentation of the "Wiñokintun ñi wirin" (Searching again for the writings) project (2025), remind us that the tension between the preservation of one's own voice and assimilation remains, since the primary purpose of the writing workshops for speakers that made it possible was none other than the translation of the Bible (Aguirre, 2024, pp. 212–218).

Recent iterations of the 'Araucanía in 100 Words' contest manifest the paradox of superficial recognition amidst ongoing subjugation. The disparity between the lone Mapuzugun prize and the multiple Spanish awards mirrors the broader socio-environmental conflict involving the sponsor, CMPC. The company's industrial monocultures represent a direct assault on biodiversity and the itxofill mogen, concepts that Naguil (2020) identifies as inseparable from the spirituality and territorial integrity essential for the survival of the Mapuche language.

The efficacy of the assimilationist agenda is significantly bolstered by an educational infrastructure that continues to limit the scope of Mapuzugun. Analysis suggests the curriculum is not designed for language transmission (Mariano, 2021), representing a structural barrier that must be dismantled to foster effective linguistic development (Luna et al., 2018). Reflecting the position of the Mapuche Territorial Council of Galvarino (2015), Lara (2024) states:

> Although this openness exists, Mapuche leaders question the practices maintained within educational institutions; for this reason, they are voicing their demands for the linguistic revitalization of Mapudungun as a language that sustains knowledge and communication, calling for a greater commitment to training individuals to teach the Mapuche language, using more relevant methodologies that ensure the actual learning of Mapudungun.

For all these reasons, the revitalization of Mapudungun faces many obstacles. Even today, in both the Chilean and Argentine educational systems, learning the language within the limited scope that has been grudgingly granted to it is unfeasible in practice. It is hardly credible that the very institution that devoted itself wholeheartedly to eradicating any trace of the Mapuche language would devote itself with the same zeal to revitalizing it.

Furthermore, with few exceptions (Lara, 2019; Chandía, 2020, 2021; Kolüman et al., [1912] 2020; Koña [1930] 2019), publications in Mapuzugun are bilingual, a practice that, in the context of sociolinguistic marginalization, has been viewed as a colonial tool (Pavez, 2003; Davies, 2004; Menard, 2006; Krause, 2008; Mallon, 2010), although some have valued their interculturality (Carrasco, 1998; Stocco, 2018). Ultimately, it is the reader's perspective that will determine whether that bilingual edition is so in a formal or functional sense. In an effort to restore functionality to the Mapuzugun versions ensuring they are used and understood, and that they do not remain merely paper but rather as living text, Jacqueline Caniguan, an academic, poet, and translator who collaborated on the extensive anthology of Mapuche women "*Kümedungun / Kümewirin*," has expressed her view that translations into Mapuzugun are an "invitation to rediscover and reclaim the language" (2010, p. 25). In this unfavorable context, however, the voices that have advocated for their own writing are noteworthy (Manquilef, 1911, 1914; Huisca et al., [1981] 2007; Quidel, 2014; Loncon, 2025; Lara, 2012b, 2025) as a valid weapon for the defense of Mapuzugun.

In this sense, the recognition of the authorship of those whom Araucanists considered informants represents a key step in the positioning of Mapuche literature (Aguirre, 2024, pp. 221–225) or, more ambitiously, in the configuration of a Mapuche literary field (Bourdieu, 1991). Terms such as oral literature, inscribed orality (Carrasco, 1990, p. 22), ethnoliterature, or oralitura have served to highlight a connection to a tradition of oral transmission, but they have also, through that distinction, expressed a categorization that seems to fall short of the prestige of the term "literature." Would anyone today dispute the inclusion of *The Song of El Cid*, the *Epic of Gilgamesh*, or the *Odyssey* in literary history, despite the fact that they were transmitted orally before being recorded in writing? For this reason, along with Lara (2024) we prefer the term "literature" for works already recorded in writing, even though these may still be in circulation through oral transmission (Loncon, 2025, p. 12).

Another pertinent point concerns language. Although when speaking of Mapuche poetry or literature the predominant language of expression is Spanish, here we wish to focus primarily on Mapuche literature in Mapuzugun. It is also worth distinguishing here between the ethnographic period and the current period which Villena (2017) calls the "institutional period" (1980 to the present) since the direction of translation shifts from Mapuzugun to Spanish (especially at the beginning of the so-called ethnographic period) to an increasingly predominant direction from Spanish to Mapuzugun, generating a momentum that has led to the retranslation into Mapuzugun of poems initially written in Mapuzugun (Stocco, 2021).

Consequently, it is impossible to evaluate the relationship between Mapuche literary production and the learning of Mapuzugun in isolation from its historical trajectory.

The viability of revitalization efforts is inherently contingent upon these broader circumstances, though arguably the most decisive factor is the fundamental agency involved in the decision to engage with the language: "Hizkuntz komunitate batek bere hizkuntza galbidetik ateratzeko erabakia hartzen duenean, berreskuratze bidearen erdia egina baitauka." (When a language community decides to save its language from extinction, it has already covered half of the road to recovery.) (Garabide, 2009, p. 9).

Literature can, therefore, contextualize learning and imbue it with meaning beyond its immediate communicative purpose, retracing the thread of memory and serving as a step toward the possibility of putting down roots, in a manner comparable to what Figueroa (2017), drawing on Niño (1998), termed the "poetics of return." Thus, the current reading of Pascual Koña's words, highlighted in his monolingual reissue ([1930] 2019), takes on particular relevance:

> Fewla kalewetuy mongen: tüfachi weche mütewe wingkatuygün; allwe ngoymarpuygün taiñ küpal ñi ngülam ka ñi zungu. Kalli rupape kiñe mufv tripantu, fey mew epe kimwerpulayay ñi mapu züngun engün. Fey mew, zugulpe tüfachi lifro egün kiñeke naq rume! (Koña, [1930] 2019, p. 9).
>
> Now life has changed: young people have become disconnected; they've almost forgotten where they come from, the advice of their elders, and their purpose in life. In a few more years, they'll forget Mapuzugun. Let's hope they at least read this book from time to time!

Viewed from a revitalization perspective, Mapuche literature from the ethnographic period, even without the dominant presence of ethnographers, has unquestionable value for learning Mapuzugun: one need only recall the full title of Lenz's 1895–1897 publication: *Materials for the Study of the Mapuche or Araucanian Language.* The texts compiled by Augusta (1910) serve the same purpose: "Texts written in authentic Araucanian, in which one may find, for the easiest and most correct learning of said language, the practical application of the rules of grammar." (p. V).

This is why the work of Manuel Manquilef (1911, 1914) is particularly relevant today, because it diverges from that of other Araucanists, whose aim was to collect the last vestiges of a culture destined for imminent extinction, in a manner not unlike the way skulls were collected at the Museo de la Plata in Buenos Aires. Manuel Manquilef envisioned a readership in Mapuzugun and set in motion a vision of writing in Mapuzugun that even today has few parallels and awaits continuation, and he confronted the leading figure of the Araucanists, Rodolfo Lenz, with "Manquilef's determination to break the ethnographic siege and elevate Mapudungun to the status of Spanish as the national language" (Payàs, 2015, p. 85).

His translations into Mapuzugun, such as Samuel Lillo's *Canciones de Arauco* (Songs of Arauco) (1900) demonstrate a sense of appropriation, of restoring to works with Mapuche themes their original "lost" that is, unexpressed form, thereby lending Lillo's tentative voice an unusual authenticity, a genuine cultural translation that is simultaneously an act of recognition and self-affirmation. An examination of a brief excerpt from Manquilef's version in relation to Lillo's poem is instructive:

> Era la edad lejana de los tiempos heroicos de esta tierra en que vibraba todavía el grito de libertad del mar hasta la sierra en que cada labriego contaba junto al fuego el poema viril de sus hazañas (Lillo, 1900, p. 13).
>
> Füta kuifi fel em! Feichi aukan mapu fel petu ñi zugülen kullkull Piren ka lafken püle Feichi kom che Elkunulu mawiza pun mew Wewpifui ina kütxal kom ñi wechan zugun. Füta kuifi fel em! (Manquilef, 1915, p. 594).
>
> It was the distant age of this land's heroic times, when the sea's cry for freedom still echoed all the way to the mountains, and every farmer would gather by the fire to recount the heroic tale of his exploits.

Freedom is conveyed through the concrete the sound of the *kullkull* (a horn used for calling), and the struggle, the defiance, "*aukan*," and the "virile poem of his exploits" through the "*wewpin*," literally the narration of victories (from "*wewün*," to win, and "*pin*", to say). The stylistic artifice of Lillo's poem has been translated into a more authentic narrative, seemingly returned to its source. We are thus faced here with our own literature, even though it comes from a translation, because in a manner similar to what Rojas (2008, pp. 48–82) describes as the "abduction of Neruda" by the anthologist Chihuailaf and the translator Manquepi (Neruda, 1996), here too a text has been selected that, from the Mapuzugun can be appropriated, in the sense of being one's own. Manquilef's importance is not only foundational for Mapuche literature, but he is also a benchmark in many respects that remains unmatched, hence the importance of recognizing his work and its significance.

Mapuche literature can, on the other hand, connect learning with the Mapuche linguistic ideology itself (Course, 2018), which is expressed literarily in various genres, both traditional (*ül, epew, piam*) and in dialogue with world literature. As expressed by Loncon (2025) and Lara (2024), language learning must be linked to the values inherent to Mapuche culture and spirituality, for which literature can be a tool of the first order. From a language with a history comparable to that of Mapuche—due to its gradual marginalization and its centuries-old territorial roots—such as Basque, it has been stated: "For the Basque language, literature, bertsolaritza [improvised singing], and song have been crucial in sustaining efforts to preserve the culture." (Garabide,

2009, p. 65). In any case, the comparison with other processes is likely unfair, since the Mapuche people have survived a genocide (Canío and Pozo, 2013) of a magnitude that is still difficult to comprehend. For this reason, Mapuche literature, through a critical reexamination of memory, also plays a fundamental role in reconstructing the dignity and identity usurped by the silencing and historical violence perpetrated by the Chilean and Argentine states, in which the recovery of Mapuzugun is a key step that must be perceived as a right, and not as pressure or imposition. It may also be argued that the old border has now been blurred, and that Mapuche and Chilean societies are largely intertwined, interconnected, and that it is difficult to understand one without the other. Therefore, what Sitzer-Comfort says may also be relevant to this case: “One reason I teach literature by American Indians is to encourage students to see the world from indigenous perspectives, to broaden their perspectives of American history, colonialism, and imperialism.” (2008, p. 160).

Nevertheless, this comparison may prove insufficient when considering the historical continuity noted by Elicura Chihuailaf (1999); he argues that the 'pacification' of the Mapuche served as a precursor to the state violence later imposed on the broader Chilean and, by extension, Argentine populace during the Pinochet dictatorship. Given that confronting traumatic history is a foundational element of the restorative process (Spear, 2014), engaging with the works of Koña ([1930] 2019), Nawelpi (Canío and Pozo, 2024), and Katxülaf (Canío and Pozo, 2013) becomes imperative. These texts, alongside the scholarship of Chandia Millanao (2020, 2021, 2022), do more than document colonial violence and linguistic erosion; they facilitate an awakening of consciousness. This critical awareness fosters a profound motivation for language acquisition, rooted in a collective commitment to reclaiming an identity systematically marginalized by dehumanizing assimilationist projects. Furthermore, the precedent set by Manquilef demonstrates that even under oppressive conditions, it remained possible to assert the agency of Mapuzugun, elevating it to a status commensurate with Spanish.

Given its historical context of marginalization, with only a few exceptions, the way we can relate Mapuche literature to Mapuzugun learning differs significantly from the perspectives we might encounter when learning a hegemonic language. To begin with, the language is not learned as a foreign language, as is usually the case with hegemonic languages, but, paradoxically, in most cases, simultaneously as a second language and as a lost mother tongue (Ancalao, 2018); rather than the practical utility often cited as motivation for learning the hyperlanguage or supercentral languages (Calvet, 2004), peripheral languages especially when they are endangered—counter that supposed utility with an identity-based motivation, linked to the recovery of a culture that, in the case of the Mapuche, has regressed due to a genocidal and assimilationist project carried out by the Chilean and Argentine states. The scarcity of works published in Mapuzugun alone may be a sign of the lingering colonial trauma and the critical

situation of Mapuzugun, and perhaps also of an understandable reluctance toward the written word, which has historically been associated with colonization, evangelization, and assimilation. Having laid this groundwork, we will highlight some promising initiatives, notable examples of the alliance between Mapuche literature and the teaching of Mapuzugun.

2 . Mapuche literature as a resource for learning Mapuzugun

María Isabel Lara Millapan is one of the most prominent advocates for the systematic, consistent, and coherent revitalization of Mapuzugun, both in theory and in practice, through oral tradition and literature. Since her doctoral dissertation, she has advocated for the relevance of reading and writing to the learning of Mapuzugun (2012b), and in addition to her bilingual poetry (2002, 2012a, 2018), she has published Mapuzugun learning materials through poems and short stories (2014) and short epew (2019). Her contribution promotes the cultural relevance of learning in dialogue with her Western pedagogical training, such as the approaches of the Common European Framework of Reference for Languages (Council of Europe, 2002):

> Systematizing the knowledge held by Mapuche speakers who are deeply knowledgeable about their culture enables them to organize methods for teaching the Mapuche language in schools where the distinctive elements of Mapuche education are not visible. In this way, we believe that the various forms of Mapuche literature can be categorized according to the children's ages and the stages of language acquisition (Lara, 2024, p. 13).

This sense of belonging and relevance of indigenous knowledge through the language itself something that aligns with the so-called Mapuche linguistic ideology (Course, 2018) is also expressed by Lara in the anthology *Kimün. Learning Mapudungun through Poetry and Stories* (p. 7):

> Only by speaking and understanding our language, Mapudungun, can we understand our history and our culture, for languages are the elements that allow us to express our thoughts, feelings, emotions, and ideologies and to access an understanding of the world.
>
> With this book, the authors seek to contribute to the teaching of Mapudungun and to the understanding of the Mapuche world through one of the most sensitive and profound elements: the collected literary narratives and poems.

According to Course (2018), Mapuche language ideology holds that there is an ontological difference between Mapuzugun and other languages such as Spanish, with

Mapuzugun's relationship to the territory (*itxofill mogen*, biodiversity) is deictic, as opposed to the symbolic nature of other languages, which makes Mapuzugun a language that implies a deeper connection to the territory.

This is also expressed in Mapuche literature, and significantly, the book opens with lines from the author's poem titled "Mapudungun mew," which serves as a central theme throughout her work as a writer and professor:

> Mapudunguli, alkütuafun tralkan
> Mapudunguli kimafun, dewma tripapale antü
> Tañi chumngechi mongelen.
>
> If I spoke Mapudungun
> I could understand the storm as an answer
> And the sunrise, as the origin of life.

Later in the same presentation, a similar idea is reiterated:

> With this, our aims are to teach and learn Mapudungun, but also to transcend its language, to understand the culture and the words that converse with the earth and the soul, with the words that are born when poets pause to listen to it. (p.9).

Another feature of Lara and Saavedra's (2014) proposal is its interculturality, an interculturality understood as a bridge that can be crossed in both directions—from the Mapuche toward the Chilean, and also from the Chilean toward the Mapuche—and toward the learning of Mapuzugun, something that is, incidentally, consistent with Naguil's (2020) proposal, which holds that Mapuzugun is the native language of Wallmapu, and that for it to regain lost ground, it would be desirable for the non-Mapuche inhabitants of the territory to also want and be able to learn it.

> Although the language under consideration is Mapudungun, we direct our work toward Mapuche children, but also toward Chilean society as a whole, for only to the extent that cultures engage in dialogue and understand one another will we be able to establish a more balanced and harmonious life. (p.8).

In *Kimün* (2014), the selections have been meticulously curated and translated by María Isabel Lara Millapán into a simplified register of Mapuzugun, specifically designed to accommodate emergent learners. While the majority of the entries are translated from Spanish, the volume's pedagogical framework prioritizes Mapuzugun acquisition through targeted activities designed for lexical reinforcement.

Consequently, the trial or convergence of versions (Stocco, 2018) is strategically reoriented to privilege the Mapuche language. This objective accounts for the predominance of concise, nearly telegraphic compositions that nevertheless retain their lyricism. The following poem by Faumelisa Manquepillán, as translated by Lara Millapán, exemplifies this approach:

> Ülkantulay
> alfüy kura mew
> molfün ngey ñi ngüman
> chumngelu? Ramtuy.
>
> He did not sing his song
> A stone struck him
> His tears were blood
> Why, he asked.
> (p. 57).

Next, the *Azümkantun* section (comprehension practice) introduces a series of concepts, including the following nouns: *allfen* (wound), *kura* (stone), *mollfüñ* (blood), *ülkantun* (song); and verbs in the infinitive and conjugated in the third person singular (just as they appear in the poem): *Ngüman* (to cry), *ngümay* (he cried); *ramtun* (to ask), *ramtuy* (he asked); *ülkantuy* (he sang). In this way, the Mapuzugun version ceases to be an indecipherable shadow (as is often the case for those who have not yet begun studying Mapuzugun when reading bilingual editions), and the Mapuzugun version invites us to listen to it, discover it, and admire it each word like a glowing treasure while the associations we gradually notice and assimilate settle in slowly, fostering learning and wonder. The repetition of newly introduced terms reinforces them through new activities in *pepilkantun* (putting what has been learned into practice). The literature is thus pedagogically integrated in an optimally planned manner, as detailed in the teaching recommendations for educators at the end of the book (pp. 88–103).

While in *Kimün* we can see how the balance tilts in favor of Mapuzugun within that difficult textual equilibrium it maintains with Spanish in a sociolinguistically highly unbalanced environment given the overwhelming dominance of hegemonic Spanish—in *Pichike epew* (2019) María Isabel Lara Millapan completely frees herself from the yoke of the imposed language in a monolingual edition in Mapuzugun. The *epew*, brief as the title suggests, are accompanied by illustrations on large cards and presuppose a Mapuche-speaking environment for their use, something that fosters learning and sets a happy precedent, even if for now it remains more the exception than the rule.

3. *Ülkantun* (song) and Mapuzugun learning.

The song, known as "*ülkantun*" in Mapuzugun, can be a powerful tool for linguistic revitalization and for learning Mapuzugun. As for its relationship to literature, little needs to be clarified following the awarding of the Nobel Prize in Literature to Bob Dylan. Suffice it to say that it lies at the root of internationally recognized Mapuche poetry, something we can see, without looking any further, in the poetry of Leonel Lienlaf, whose works oscillate between writing and song, which in his case are intimately connected: many of the poems from his first book (1989) can be heard as ülkantun on a later album, significantly titled *Canto y poesía mapuche* (1997) (Mapuche poetry and singing).

A leading figure and well-known, respected *ülkantufe* (singer), Joel Maripil (Kechukawin, 1964) uses song to revitalize Mapuzugun, with lyrics that are easy for children to understand who are his primary audience (just as with María Huenuñir); "Through song, people used to teach, give advice, and greet one another, and today, through song, following their example, we are going to reintroduce Mapuzugun to children", Maripil tells us as he presents this ülkantun, significantly titled "Kimayiñ mapuzugun" (Let´s learn Mapuzugun) which opens the CD titled *Choyün ülkantun. Music for Children* (2019), which was awarded the 2020 Pulsar Prize for the promotion of indigenous peoples' music:

> Mari mari, mari mari, / pu pichikeche, / mari mari, mari mari, / pu pichikeche, / fachantu nga ülkantualu nga iñchiñ / fachantu nga ülkantualu nga iñchiñ / fill püle, / fill püle, / fill püle, / fill püle, fill püle, fill püle, / fachantu nga ülkantualu nga iñchiñ / fachantu nga ülkantualu nga iñchiñ. / Fey mew fey mew kimayiñ mapuzugun, / fey mew fey mew kimayiñ mapuzugun, / fey mew fey mew ülkantualu nga iñchiñ.
>
> Hello, hello, / children / hello, hello, children / today we'll sing / today we'll sing / everywhere / everywhere / everywhere / everywhere / today we'll sing / today we'll sing / that's how we'll learn Mapuzugun / that's how we'll learn Mapuzugun / that's how we'll sing.

Here, the *ülkantun* as in the albums dedicated to children by María Huenuñir serves to revitalize Mapuzugun, and the repetitions and simple structures greatly facilitate learning. Thus, the *ülkantun* not only retains its autonomy from poetry but also keeps Mapuzugun alive and serves as a primary tool for its widespread dissemination and revival "*fillpüle"*, everywhere. Joel Maripil's charisma as a genpin, as a communicator, only increases his impact and success.

For her part, María Huenuñir is an example of a creative response to the constraints of the Chilean educational system, enabling her to teach Mapuzugun from a culturally relevant perspective:

> there are songs that are not relevant to us, such as "Arroz con Leche," and even more so "El Caballito Blanco," which says "I have, I have, I have, you have nothing," because for us, it is not about having and having on one side alone and without sharing with the other; in our community, everything is shared, and I cannot tell my father that he has nothing, so it is almost derogatory to be a translation or an approximation of that kind of song. Our thoughts are based on other principles, namely sharing and relating to the entire universe. (Salazar, 2009, p. 62).

At the presentation of her CD *Kuifike aukiñ wiño choyütulepay* (2019) in Temuco, held entirely in Mapuzugun at the headquarters of the Mapuzuguletuaiñ association, the poet stated: "*Inche wirintukuken tañi rakizuam, welu konpun chillkatuwe mew chew müley pichikeche, so that we may speak pichikeche and use Mapuzugun in our daily lives, and so that we may txipay tufachi zugu*." (I'm putting my thoughts down in writing, but I started working at a school where there are children, and children learn Mapuzugun best through songs, which is why this [the CD] came about). Through the repositioning of Mapuzugun in both her poetry and her singing (Aguirre, 2023), María Huenuñir demonstrates that it is also possible to revitalize Mapuzugun in the city, and by working with children.

4. Conclusion

Regarding literature composed expressly for the purpose of teaching Mapuzugun, it may be worth clarifying that it could be considered ancillary or applied literature (Reyes, 1944; Gómez, 2023). Literature and language learning are, in principle, autonomous fields whose combination can serve as either a boost or an obstacle for both. If a German tries to begin studying Spanish by reading Don Quixote, he will likely become frustrated and give up as it seems impossible; to venture into readings that require an advanced level, training will be necessary—that is, readings adapted to the learner's level (Lara, 2024, p. 13). Literature, for its part, could be considered ancillary or applied if it serves an external purpose, in this case producing materials that facilitate language learning. For a literary field (Bourdieu, 1991) in formation, such as the Mapuche, its autonomy is no minor issue. By way of comparison, we can consider the controversy raised in this regard Bernardo Atxaga, the most widely translated writer in the Basque language, had with two critics in the field of Basque-language literature (Sarasola, 2017). The autonomy of literature entails a critical and creative stance, not subject to any program, whatever it may be, that could

limit it. In this sense, literature that aims solely to produce materials for language learning would undermine this principle of autonomy. Added to this is the lack of a distinct space for the language, due to the prevalence of bilingual editions (Davies, 2004) and the scarcity of original texts written in Mapuzugun. As Bastián Chandía Millanaw (2021) reminds us, these adverse circumstances can be overcome through coordination, by being aware of the importance of Mapuzugun and its historical context, and knowing that the only way to defeat the beast (the monolingual linguistic ideology that despises linguistic diversity) is by speaking, singing, reading, writing, and living in Mapuzugun.

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Chapter 4: The Ecology of Loss: Environmental Injustice, Climate Ruin, and the Fragile Politics of Survival in Amitav Ghosh's *The Hungry Tide* and Octavia E. Butler's *Parable of the Sower*

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Abstract

This paper argues that Amitav Ghosh's *The Hungry Tide* and Octavia E. Butler's *Parable of the Sower* portray ecological catastrophe not as a passive setting but as a force that reorganises knowledge, ethics, and survival. Using the framework of plant pedagogy, the essay demonstrates that both novels reject the belief that nature exists merely as scenery or resource. Mangrove roots, tidal currents, drought, dust, exhausted soil, and failing crops instead become agents that shape human behaviour and perception. Drawing upon Rob Nixon's concept of "slow violence," the paper finds that environmental destruction unfolds gradually and unevenly, affecting most severely those already marked by poverty, migration, labour, race, and political abandonment (Nixon 2). In *The Hungry Tide*, the erosion of islands and the unstable ecology of the Sundarbans expose the vulnerability of marginal communities. In *Parable of the Sower*, drought, hunger, and displacement reveal how climate collapse intensifies social violence and economic inequality (Butler 89).The essay further employs Ursula Heise's theory of ecological consciousness, Jane Bennett's notion of vibrant matter, and Michael Marder's philosophy of vegetal life to show that both novels grant agency to the nonhuman world (Heise 56; Bennett 6; Marder 12). Ultimately, the paper finds that survival depends not upon mastery over nature but upon attentiveness, adaptation, and reciprocal forms of coexistence.By comparing Ghosh's "tide country" with Butler's declaration that "God is Change," the study concludes that both texts imagine ecological crisis as a pedagogy of instability, teaching characters to survive through relation rather than possession, certainty, or human exceptionalism alone today within fragile landscapes everywhere.

Keywords: Plant Pedagogy - Ecological Cognition - Vegetal Philosophy - Slow Violence – Post-human Ecologies - Environmental Justice

Introduction: Ecological Catastrophe and Plant Pedagogy

In Amitav Ghosh's *The Hungry Tide* and Octavia E. Butler's *Parable of the Sower*, ecological catastrophe is never a passive background against which human action unfolds. Flooded islands, shifting tides, exhausted soil, and drought-stricken roads function as active forces that shape the ways characters think, remember, and survive. Both novels therefore challenge anthropocentric assumptions that place the human at the centre of meaning. Instead, they imagine a world in which knowledge emerges through contact with damaged landscapes and vulnerable forms of life.

This essay approaches these texts through the idea of plant pedagogy, a mode of learning grounded in relation, adaptation, and attentiveness to the nonhuman world. Michael Marder argues that vegetal life teaches "an existence exposed to the other" because plants survive through reciprocity rather than mastery (Marder 42). Such a perspective illuminates Ghosh's Sundarbans, where the mangrove forest continually unsettles human attempts to control it. Piya quickly discovers that the "tide country" resists every map and boundary because land and water remain in constant motion (Ghosh 7). The forest becomes not merely a setting but a teacher that reveals the fragility of human certainty. A similar lesson structures Butler's ruined California. Lauren Olamina travels through landscapes scarred by drought, hunger, and violence, yet these devastated spaces also generate new forms of thought. Her recurring assertion that "God is Change" rejects the fantasy of stability and teaches survival through flexibility and collective responsibility (Butler 3). Jane Bennett's theory of vibrant matter is useful here because it recognises agency in nonhuman forms, including soil, dust, seed, and climate (Bennett 6). In both novels, the environment ceases to function as inert scenery and becomes an active participant in human history.

Rob Nixon's concept of "slow violence" further clarifies the politics of these landscapes. Ecological destruction unfolds gradually and unevenly, falling most heavily upon the poor and displaced (Nixon 2). Ursula Heise similarly argues that environmental crisis requires an enlarged ecological consciousness capable of linking local suffering to planetary systems (Heise 56). Ghosh and Butler ultimately suggest that climate ruin does not merely threaten survival; it transforms how survival itself must be imagined. By placing mangroves, seeds, currents, and drought at the centre of narrative meaning, both writers propose that learning begins when human beings relinquish mastery and recognise themselves as only one vulnerable element within a wider ecological community in an era of crisis. Their novels teach endurance through ecological humility.

Slow Violence and Environmental Injustice

Rob Nixon uses the phrase "slow violence" to describe forms of destruction that unfold gradually, invisibly, and unevenly across time (Nixon 2). Unlike spectacular disasters, slow violence often remains hidden because its effects accumulate through erosion, contamination, drought, displacement, and poverty. Amitav Ghosh's *The Hungry Tide* and Octavia E. Butler's *Parable of the Sower* make this invisible violence painfully visible. In both novels, ecological ruin does not arrive suddenly. Instead, it emerges through long histories of neglect that fall most heavily upon those already vulnerable.

In *The Hungry Tide*, the Sundarbans appear beautiful, yet that beauty conceals a fragile landscape shaped by constant erosion. Islands disappear without warning, riverbanks collapse, and human settlements remain permanently threatened by water. Fokir and the other islanders understand that survival depends upon living within this uncertainty. Kusum recognises that the poor possess no protection against the violence of the tide because "the water was giving way beneath their feet" (Ghosh 261). The phrase captures more than a literal condition. It suggests that environmental insecurity is inseparable from political abandonment. The people of Morichjhapi are not destroyed only by nature; they are destroyed because the state decides that their lives are expendable.

Dipesh Chakrabarty argues that climate change reveals the unequal relationship between ecological crisis and social power because the poorest communities are always the least protected (Chakrabarty 221). Ghosh's novel repeatedly demonstrates this truth. The Morichjhapi massacre exposes how displaced refugees are denied land, shelter, and political recognition. Their settlement is erased not only through state violence but also through the unstable ecology of the islands. The tide country therefore becomes a place where environmental fragility and social injustice reinforce one another.

A similar process structures Butler's California. Drought, food scarcity, polluted water, and devastating fires have become ordinary features of daily life. Yet these disasters do not affect everyone equally. Wealthier communities protect themselves behind walls, while the poor are left to travel through dangerous roads and ruined neighbourhoods. Lauren repeatedly observes that survival depends upon resources available only to the privileged. "Water is expensive," she remarks, and the sentence reveals how even the most basic necessity has become a commodity controlled by power (Butler 18).

Lauren's journey further demonstrates that climate collapse intensifies pre-existing inequalities of race, class, and labour. Black and poor communities are especially vulnerable because they lack protection, mobility, and political influence. The roads are filled with migrants, labourers, and homeless families whose suffering remains invisible. Ramachandra Guha argues that environmental destruction is always linked to unequal structures of power because those who contribute least to ecological damage usually suffer most from its consequences (Guha 102). Ghosh and Butler therefore refuse to separate environmental crisis from histories of displacement, exploitation, and abandonment. Their novels insist that climate catastrophe is never simply natural. It is shaped by human systems that decide whose lives remain valuable and whose lives may quietly disappear from memory forever.

Mangroves, Soil, and the Agency of the Nonhuman

Mangroves, soil, dust, drought, and tidal water possess unusual force in Amitav Ghosh's *The Hungry Tide* and Octavia E. Butler's *Parable of the Sower*. Neither novel treats the nonhuman world as a silent background to human experience. Instead, the environment acts, resists, and intervenes. Human beings move through landscapes that shape their choices, emotions, and possibilities of survival. Jane Bennett's theory of vibrant matter is especially useful here because Bennett argues that matter is never inert. Plants, weather, rivers, and objects possess their own forms of agency, influencing human life in ways that remain difficult to predict (Bennett 6).

In *The Hungry Tide*, the mangrove forest continually unsettles the illusion that people can control the tide country. The Sundarbans refuse fixed boundaries. Land becomes water, rivers alter their course, and islands vanish beneath the tide. Piya discovers that scientific knowledge alone cannot master this unstable world. Fokir's understanding of the forest depends instead upon listening to currents, tides, birds, and mud. Ghosh repeatedly describes the mangroves as "a universe animated by rhythm, by the interplay of land and water" (Ghosh 224). The phrase suggests that the landscape possesses its own intelligence and rhythm.

Michael Marder's philosophy of vegetal life deepens this understanding. Marder argues that plants exist through relation and adaptation rather than through mastery or control (Marder 42). The mangrove roots in Ghosh's novel embody precisely such resilience. Twisted, submerged, and constantly exposed to salt water, they survive by remaining flexible. They become a model for the islanders themselves, who must learn to endure instability rather than resist it. Kusum recognises that survival in the Sundarbans requires "making peace with the river" instead of fighting against it (Ghosh 287).

A similar logic shapes Butler's California. Dust, drought, exhausted soil, and seeds function as active forces rather than passive scenery. Lauren Olamina repeatedly notices how the land has changed: trees have died, rivers have dried, and food no longer grows easily (Butler 41). Yet Butler also grants agency to seeds and gardens. Lauren carries acorns and stores seeds because she believes that planting offers a future beyond destruction. Her Earthseed philosophy begins from the recognition that "God is Change" and that survival depends upon learning from the mutability of the natural world (Butler 3).

By foregrounding mangroves, soil, seeds, and drought, Ghosh and Butler dismantle the belief that humans occupy the centre of existence. Serenella Iovino argues that matter "stories" itself because landscapes preserve histories of suffering and survival within their physical forms (Iovino 97). The Sundarbans remember migration, erosion, and death; Butler's parched roads remember hunger, inequality, and fear. Nonhuman matter therefore becomes a witness and participant in history. These novels suggest that environmental crisis cannot be understood through human experience alone. The damaged earth possesses its own agency, and any future politics of survival must learn to recognise and endure that unsettling truth together. In both narratives, learning begins when characters abandon certainty and listen carefully to the damaged world surrounding them through patience instead of conquest entirely.

Climate Ruin and the Fragile Politics of Survival

In Amitav Ghosh's *The Hungry Tide* and Octavia E. Butler's *Parable of the Sower*, survival is never imagined as a heroic triumph over nature. Ecological collapse renders such fantasies impossible. Instead, both novels portray survival as fragile, collective, and dependent upon the ability to adapt to unstable environments. The islanders of the Sundarbans and Lauren Olamina's travelling community endure not because they dominate the world around them, but because they learn to live within its uncertainty.

In *The Hungry Tide*, the people of the Sundarbans inhabit a landscape shaped by flood, erosion, and tidal violence. Their homes may disappear overnight, and every journey across the water carries the possibility of death. Yet the islanders continue to live there because they understand that survival depends upon attentiveness rather than mastery. Fokir reads the river by observing birds, currents, mud, and changing weather. His knowledge cannot be separated from the landscape itself. Piya gradually realises that scientific instruments alone cannot explain the tide country because the forest follows rhythms beyond human control (Ghosh 224). Ecological knowledge therefore emerges through humility, patience, and relation.

The Morichjhapi refugees offer an even more precarious example of survival. Having already lost their homes once, they attempt to build a new life on unstable land. Kusum insists that "we had to learn to live with the river" because resistance alone cannot preserve life in the Sundarbans (Ghosh 287). Her words reveal an ethics of adaptation grounded in coexistence rather than domination. Anna Tsing argues that precarious life requires forms of collaboration that emerge from instability rather than certainty (Tsing 20). The Sundarbans embody precisely this condition. Human beings survive only through fragile negotiations with water, forest, and tide.

A comparable politics of survival shapes Butler's California. Lauren Olamina travels through landscapes devastated by drought, hunger, and violence. Roads are filled with refugees, abandoned towns, and people desperate for food or water. Yet Lauren refuses to imagine survival as an individual achievement. She repeatedly gathers others around her, forming a community based upon mutual care and shared labour. Earthseed emerges not simply as a philosophy but as a practical response to climate collapse. Lauren's insistence that "God is Change" teaches that life depends upon flexibility and collective responsibility rather than upon the illusion of permanence (Butler 3).

Stacy Alaimo argues that environmental crisis exposes the radical interdependence of bodies, landscapes, and social systems because no individual can remain separate from ecological damage (Alaimo 20). Butler's novel demonstrates this interdependence through the vulnerability of the body itself. Hunger, thirst, exhaustion, and fear shape every decision Lauren makes. She survives only by travelling with others and by recognising that dependence is not weakness. Ghosh and Butler therefore imagine climate ruin not only as a condition of loss but also as a force that produces new forms of solidarity, adaptation, and responsibility within damaged worlds. Both novels finally suggest that survival begins when human beings abandon fantasies of control and learn instead to inhabit uncertainty with care, attention, and collective resilience.

Ecological Consciousness and New Modes of Learning

Amitav Ghosh's *The Hungry Tide* and Octavia E. Butler's *Parable of the Sower* imagine ecological crisis not only as a condition of loss but also as a form of education. Their characters learn through damaged landscapes, unstable climates, and encounters with nonhuman life. The novels move beyond local suffering toward an awareness that human existence is inseparable from wider planetary systems. Ursula Heise argues that ecological consciousness requires understanding how local environments connect to global processes and shared histories of risk (Heise 56). Both novels develop precisely this enlarged perspective.

In *The Hungry Tide*, the phrase "tide country" carries more significance than a geographical description. The words suggest a landscape defined by instability, movement, and uncertain boundaries. Rivers alter their course, islands disappear, and human settlements remain permanently vulnerable. Piya gradually realises that the Sundarbans cannot be understood through scientific categories alone because the region exists through continual transformation (Ghosh 7). The tide country therefore becomes a lesson in mutability. Human beings survive there only by recognising that permanence is impossible.

This lesson also possesses an ethical dimension. Nilima explains that the people of the islands have learned to live with "the knowledge that nothing lasts forever" because the land itself may vanish at any moment (Ghosh 79). Such knowledge produces a different relationship to the environment. Rather than imagining themselves as masters of the landscape, the islanders understand themselves as vulnerable participants within it. Timothy Morton argues that ecological thought begins when people recognise their entanglement with forms of life that exceed them (Morton 27). Ghosh's novel repeatedly demonstrates this entanglement through the relationship between people, forest, water, and tide.

A similar process shapes Butler's California. Lauren Olamina's repeated declaration that "God is Change" functions not merely as a religious slogan but as a pedagogy of survival (Butler 3). Lauren learns that the desire for stability has become dangerous because the world itself has been transformed by drought, violence, and climate collapse. Earthseed teaches that survival depends upon accepting mutability rather than resisting it. Lauren's philosophy therefore moves beyond individual suffering toward a broader awareness of collective vulnerability.

Heise further argues that ecological consciousness requires new forms of ethical responsibility because environmental crisis links distant people and places through shared conditions of risk (Heise 61). Butler's novel embodies this idea through Lauren's journey across California. The suffering she encounters is never isolated. Hunger, migration, racism, environmental destruction, and social violence appear as interconnected realities. Her community survives only when individuals recognise their dependence upon one another.

By placing "tide country" beside "God is Change," Ghosh and Butler create languages through which ecological crisis becomes intelligible. These phrases teach characters to think beyond mastery, certainty, and human exceptionalism. Instead, both novels propose a mode of learning grounded in instability, relation, and ethical attention to a world permanently altered by climate catastrophe.

Conclusion: Beyond Human Exceptionalism

Amitav Ghosh's *The Hungry Tide* and Octavia E. Butler's *Parable of the Sower* ultimately reject the belief that human beings exist apart from the natural world. Throughout both novels, mangroves, rivers, drought, dust, and exhausted soil are never passive settings. They shape memory, suffering, and survival. Ghosh and Butler therefore challenge the anthropocentric fantasy that nature can be controlled, mastered, or endlessly exploited. Instead, they imagine a world in which human life remains inseparable from fragile ecological systems.

In *The Hungry Tide*, the Sundarbans constantly remind their inhabitants that permanence is impossible. Islands vanish, riverbanks collapse, and the tide repeatedly erases human attempts to impose order upon the landscape. Piya eventually understands that scientific knowledge alone cannot explain the tide country because the region exists through movement and uncertainty (Ghosh 224). Likewise, Fokir's knowledge emerges not through mastery but through attentiveness to birds, water, and mud. The novel therefore suggests that survival depends upon humility before forces larger than the human.

A similar lesson shapes Butler's California. Lauren Olamina learns that the desire for stability has become dangerous in a world transformed by drought, violence, and climate collapse. Her repeated assertion that "God is Change" teaches that survival requires adaptation rather than control (Butler 3). Earthseed offers not a promise of domination over the environment but an ethics of coexistence grounded in flexibility, labour, and mutual dependence. Michael Marder argues that vegetal life reveals forms of existence based upon relation rather than possession because plants survive through exposure, vulnerability, and reciprocity (Marder 42). Ghosh and Butler repeatedly imagine human beings in precisely these terms. Their characters endure only when they recognise themselves as part of a larger ecological community.

Ursula Heise argues that ecological consciousness emerges when people recognise that local suffering is connected to planetary systems and shared risk (Heise 61). Both novels arrive at this awareness. The suffering of the Sundarbans islanders and the ruined communities of California cannot be understood separately from histories of exploitation, displacement, and climate destruction. Ghosh and Butler finally transform ecological crisis into an ethical demand: to imagine futures grounded not in exceptionalism, but in interdependence, responsibility, and care. By placing environmental fragility at the centre of thought, both novels suggest that the future depends less upon conquering the earth than upon learning to inhabit uncertainty with patience, reciprocity, and a renewed sense of collective responsibility today.

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Chapter 5: The Role of Digital Media in Decoding Political Communication Patterns

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Abstract

With press freedom at risk, the present-day mainstream media is forced to succumb to the state's supremacy or else face censorship. The internet unlocked a digital space to express issues of public interest that the mainstream media seldom discussed and reported. The global audience, particularly the youths, prefers digital media like YouTube and Instagram for their creative content. While YouTube and Instagram continue to democratize the political voices, the study underscores the risk of polarization in content distribution. This study aims to examine the impact of digital media like YouTube and Instagram in engaging the audience by sensitizing them on public issues affecting them through the interpretation of political communication patterns. A qualitative case study methodology was employed to decode the political communications patterns manufactured by the mainstream conventional media. Data were collected from global scholarship on media studies and India-specific real-life issues like the farmer protests and biased reportage by the traditional media. Findings reveal that independent media like YouTube channels exposed the government machineries and their failure to handle COVID-19-like situations. Results indicated that Instagram's anti-hate campaign played a significant role in countering the polarization narratives. The introduction of the 2023 Broadcasting Services Bill was subjected to widespread criticism, citing a threat to freedom of speech and government control over the content. Yet, findings highlight that independent media aim to sensitize the public through creative stories and include fictitious characters to engage and connect them with matters that affect their daily lives. Focusing on the Framers' protest in 2020 as a specific case study contributes to understanding the power of digital media in countering the mainstream narrative and documenting the ground realities.

Keywords: Independent media, political communication, YouTube, Instagram, narratives, polarization

Introduction

The advent of digital platforms attracted a global audience to interact and connect along political dialogues. With technology-driven interactive software tools, the inventiveness of independent media gained better audience reception than the stereotypical mainstream media. It is obvious that independent media has no agenda like the traditional ones. From capital investment to workforce, the traditional media require enormous funding, and they rely on either government ads or corporate sponsorships. Therefore, every aspect of communication undergoes strict regulation before reaching the final stage of consumption. YouTube and Instagram are the most sought-after media for political news, where youths adore the shorter versions in the form of reels. The presentation is brief and creative so that the public immerses itself in the political ecosystem. As of 2026, a report from BankMyCell shows that 60% of audiences across the globe own a smartphone. This clearly indicates the reach of digital platforms surpassing traditional media.

Independent media garnered much attention when they exposed the ill-motivated political actions, particularly during election campaigns. They played a significant role in elucidating slogans used by political parties on the ground of caste and religion. The public began to understand the malicious intent behind those political statements after watching the videos of the independent content creators. One cannot expect traditional media to report against a particular political party in power or a corporate giant that has made a significant backing. Therefore, it is obvious to broadcast programs with an agenda to influence and distract the viewers from the actual realities. This shift unlocked opportunities for political thinkers, academicians, and social activists to use the digital arena to expose systemic issues and raise public awareness. The viewers' shift toward digital communication posed a bigger challenge to the political parties to regulate the content that might expose their deceptive practices. Political messages intentionally skipped by the mainstream media are now interpreted and presented in the form of reels on Instagram, a most sought-after medium among rural youths. A shorter video of less than 5 minutes with its satirical content connects better with the audience than the traditional one. On the contrary, the independent media are accused of sensationalism to attract larger viewership based on algorithms. When the same shorter version of the video with a confrontational caption misinforms the audience. The fact is that independent channels without sufficient viewership and subscriptions resort to such tactics to attract audiences. Multiple studies highlight the role of independent media in publicizing information during COVID-19 pandemic-like situations. While the conventional TV channels avoided reporting the ground reality, like the shortage of beds and vaccine scarcity, independent media exposed the government's failure by placing in facts directly from the field of occurrence. The success and reach of an

independent media compel the public functionaries to censor the content in case it is found to be anti-government by demonetizing and blocking the channel.

The objective of this chapter is to study the impact of digital media like YouTube and Instagram in engaging the audience by sensitizing them on public issues affecting them through the interpretation of political communication patterns. This study analyzes the specific cases to explore the factors that drive the independent media to challenge the traditional reporting and interpretation of matters of public interest.

Review of Literature

Theoretical Frameworks

The path-breaking contribution from theories like agenda-setting (McCombs & Shaw, 1972) and framing illustrate the selective reportage of issues to shape public perceptions aligned with or against the political agendas. The Mediatization theory (Strömbäck & Esser, 2014) further protracted the role of media logic that infiltrate throughout the political processes. With limited restriction from the state offices, independent media operates under a democratic system with accountability, pluralism and no room for corruption. However, the challenges persist from political hegemony, corporate syndicate and digital shifts dynamics (Schieck, 2003; Voltmer & Rawnsley, 2019). Across the globe, with selective reportage, editorials, framing tactics, the media roleplay as a political actor to influence policy agendas to shape both the elite and public opinion (Page, 1996). The 2015 German refugee crisis and 2017 French elections witnessed media framing shaping the public sentiments and voter preferences.

Autonomy of Independent Media under different political regimes

Independent media face severe regulatory restrictions in an authoritative democratic setup. Despite the content is monitored, they remain a prominent medium to express disagreement and counter state- sponsored narratives. Indonesia, under its dictatorial role- owns and control the media outlets – alter the content, restrict access top factual information and mainstream the elite interests. Laws like the Information and Electronic Transactions Act are misused to intimidate journalists and criminalized legally. Very few publicly aided media outlets like the Project Multatuli withstood against all odds through alternative means of operation. China is infamous for its media censorship and media outlets makes no attempt to challenge the state narratives. The sensationalism and amplification sometimes divert the actual cause and result in misinformation. However, it's the same tactics on social media that gave space for marginalized voices like the Nigeria's 2020 #EndSARS protests. The above-mentioned cases explain how the autonomy of media under different political regimes face content moderation and their influence to shape public options against state narratives.

Political Communication and Polarization at digital Platforms

Digital platforms underscore the novelty in user engagement with micro connectivity and exposure to diverse discourses. Despite these benefits, they make room for polarization via eco chambers augmented by algorithmic manipulation and disinformation. A significant observation of Steinfeld and Lev-On (2024) contest the basic "filter bubble" narrative that digital mediums like WhatsApp, Facebook generate standardized opinions, while the conventional mass media like TVs and websites offer diverse perceptions. The Social media autonomy over agenda-setting dominates the traditional media, but still the elite syndicate owns the control. The cable news in the US and the social media is criticized for its discriminatory partition with race, case, creed and religion to reinforce polarization (Barberá, 2020; Guess et al., 2020; Cinelli et al., 2021). Globally, these trends and patterns pave way for prejudice content, misinformation and digital amplification of sensationalism.

Political Impact on Media under varied regimes

The political impact of media varies with regime types. Under differing democratic regimes, Europe's public service broadcasting like the BBC defines content regulation to balance autonomy and public interest, on the contrary the U.S. endorse for deregulation permitting bigger media conglomerates and the ongoing net neutrality debates. Dictatorship kind of regime directly control and use media as a propaganda tool to enforce their viewpoints. Indirect pressures through advocacy groups, social media hashtag movements impact the content across the globe. With agenda setting and framing tactics, media grabs the attention of international institutions like the World Bank to push in the policy agenda strengthening its decisive role across the geographical boundaries.

Social media and Independent Digital Media: Indian scenario

Social media exhibits a Manichaean nature in Indian politics. The 2014 general elections in India first witnessed the deceptive means of social media amplification with Twitter being the highest audience engagement medium (Ahmed & Cho, 2019; Chaturvedi, 2016). In 2019, WhatsApp and YouTube ascended as a popular medium for micro-audience management. Public lost trust in the mainstream media's deceptive reportage and cherry-picking issues to serve their political masters and this facilitated the digital mediums to deliver unbiased content. Ravish Kumar, a notable journalist walked out of the mainstream media citing censorship and political pressures and started an Independent YouTube channel with highest subscribers. His Instagram reels of shorter duration have widespread acceptance among the masses, considered effective for its eloquent presentation of facts (Kumar, 2023; Rest of World, 2023; Institute of South Asian Studies, 2024). COVID-19 like situations exposed the biased reporting by the mainstream media, in particular those affiliated and owned by giant

corporates with political allegiance. Death related cases due to shortage of doctors, beds and oxygen related seldom discussed to protect their political syndicate who fund for their survival. Independent media like YouTube channels exposed the government machineries and their failure to handle the COVID like situations. There were multiple instances of ruling government exposed to public and this necessitated to enforce laws to censor the content. The introduction of 2023 Broadcasting Services Bill subjected to wide spread criticism citing a threat to freedom of speech and government control over the content. Several YouTube channels were blocked for decoding the political agendas that exposed government's maladministration.

Differing Scholarly Viewpoints

The scholarship on independent media observed divergent viewpoints. A sect of optimist scholars considers independent media as an engaging medium for marginalized voices to share and deliberate unreported civic concerns with transparency (Mancini, 2013; Delli Carpini & Williams, 2011). On the contrary, scholars underscore the risk of polarization, provoking captions, misinformation, selective attack (Prior, 2016; Chen et al., 2021). All these viewpoints emphasize the disputed role of independent media between democratic content delivery and vulnerable to political hegemony.

Research Gaps and Contribution

Significant gaps persist in the literature, particularly on the visual impact of Instagram reels and polarized content post elections. There isn't notable scholarship on role of hybrid media diplomacy in international organizations. Most of the studies focus on single country alone like the U.S., the focus towards Global South (India, Africa and Latin America) is limited. Another limitation is that there are few comparative analyses of independent media under different regimes.

Interdisciplinary approaches to mediatization in non-Western environment is limited. This paper addresses these gaps by synthesizing global theoretical and empirical insights with India-specific evidence, examining how independent digital media interprets and reshapes communication patterns intertwined with political agendas.

Synthesis Summary

Under multiple regimes and political background, independent media facilitate seamless democratic engagement with accountability and a medium to polarize and capture. Media's efficiency hinge on regime nature, digital platform possibilities, and content autonomy. The agenda setting theory mediatization offer analytical lens, but potential context- specific risks and opportunities persist in practical applications. India exemplifies the transformational and contentious significance of social media in hybrid

democratic contexts. This review provides a basis for the investigation of the media's interpretive capabilities in politically contentious communication situations.

Research Methodology

This research employs a qualitative case study methodology to examine the role of independent media in decoding the political communications patterns manufactured by the mainstream conventional media, enabling an in-depth exploration to expose the tactics employed in the real-world contexts. Case studies are particularly effective in elucidating deceptive tactics employed by traditional media such as agenda setting, corporate capture, and study the independent media influence to counter polarization and the hidden agendas of the governments. This study employed purposeful sampling to pick examples that were different from each other and would show us a constructive picture of the overall scenario. The criteria were: (a) domestic issues (India specific); (b) current trend (verifiable proof of the content censorship); and (c) corporate vs. state-sponsored (agenda-based reporting).

Results and Discussion

Case Study 1: Agenda-setting and Framing discussions on mainstream TV media

The researcher attempts to illustrate to the readers the "agenda-setting"-based panel discussions that distract the public attention from the grassroots reality. The central government of India presents the budget every year, and we analyzed the budget speech document to identify the key sectors that were prioritized for development. Economic growth ranked first, followed by other sectors. For this study, the researcher identified key areas like women's safety, education, and healthcare. Everyone agrees that the government's focus on economic infrastructure, fintech, AI technologies and so on makes sense. However, the neglect of key issues identified by the researcher and their exclusion from the budget is a separate topic that is not relevant to this study. We aim to study the patterns of media reportage to sidetrack the shortfalls in the budget. The focus is on the manipulative tactics employed by the mainstream media. The mainstream media's agenda is to protect the governments in power and amplify the economic narratives of corporations, creating the impression that the budget is well received by stakeholders. Alongside, the independent media, through their social media channels, run exclusive content on the budget, decoding its shortfalls without any agenda. There are shorter versions, like Instagram reels, and detailed versions on YouTube channels that highlight the budget takeaways. A list of key issues left out in the budget and purposefully avoided by the conventional media is discussed here to sensitize the public on issues affecting their daily lives. The message is obvious communicate real-life incidents supported with data and figures to expose the political slant attached to a particular piece of news or media reportage.

Case Study 2: Farmers' Protests (2020-2021)

The farmers' protest in India against the agricultural laws demonstrated the strength of independent media. YouTube channels recorded the ground realities, countering the mainstream narrative of "anti-national" agitators. While the protests were dubbed as foreign-sponsored, Instagram influencers used Reels to tell personal stories and rally support for the cause. Millions were sensitized to read government communication as evasive, and these efforts helped the repeal of the laws in 2021.

Case Study 3: Post elections scenario in India (After 2024)

Independent media proved their relevance in 2025 economic slowdowns by demystifying the inflation narratives to sensitize the general public. Social media platforms, particularly YouTube, uncovered the government's pro-corporate sympathy and its impact on public discourse. A new electoral narrative, termed "religion at risk," has been introduced by political forces that radicalize public thoughts and actions. Right-wing religious groups claim that Hindus are at risk, while left-wing groups express concern for the lives of Muslims. Political actors stage movements to polarize the public on religious grounds, intending to divert attention from persistent issues and create hatred between different groups. A vote bank strategy practiced by political parties injects selective religious dogmas to persuade the electorate to get identified with the same so that the votes aren't transferred to differing ones. Instagram's anti-hate campaign played a significant role in countering the polarization narratives. Influencers from The News Minutes worked on these lines to promote fact-checked content. As governments stand exposed, the newly introduced Broadcasting Bill blocked YouTube channels under the guise of law.

Conclusion

The popularity of YouTube and Instagram in India has transformed the role of independent media to decode political agendas and sensitize the public on matters affecting their lives. Findings from the case studies reveal that independent media is a powerful tool to challenge the stereotype of political dominance with challenges like state autonomy and censorship. With suitable policies in place, persuade independent content creators to enter the digital space courageously to combat misinformation and polarization. There's a scope for future research to study the application of artificial intelligence (AI)-based technologies to counter manufactured information. Ultimately, digital platforms reinforce public trust in democracy by amplifying voices.

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Chapter 6: Strengthening Youth Peace Education through Activity-Based Learning: Insights from Sri Lanka

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Abstract

With a primary focus on youth in post-conflict nations, peace education has become an essential approach for promoting social cohesiveness, conflict transformation, and lasting peace. Activity-based training has drawn more attention in this discipline as a hands-on, interactive approach to improving learning results. With an emphasis on the Sri Lankan context, this study critically assesses the function of activity-based training in youth peace education. The study evaluates the beneficial effects and limitations of activity-based approaches by synthesizing previous research on youth involvement, experiential learning, and peace education using a systematic literature review strategy. Findings demonstrate how activity-based training, which is founded on theories of experiential and transformational learning, is more successful than conventional didactic approaches in encouraging youth to alter their attitudes and behaviors. Role plays, simulations, and group-based activities are examples of interactive techniques that foster critical thinking, the growth of empathy, and collaborative problem-solving. However, the study also emphasizes that the success of these strategies is contingent upon several contextual factors, such as the quality of program design, the competence of facilitators, and the broader sociopolitical environment. While activity-based peace education initiatives have aided initiatives aimed at reconciliation in Sri Lanka, their effectiveness is nevertheless shaped by enduring structural issues like ethnic divides and unequal access to resources. By offering a context-sensitive synthesis of activity-based peace education and highlighting the significance of modifying educational approaches to local circumstances, this study adds to the body of literature. The results point to the necessity of encouraging inclusive, long-term engagement tactics, reinforcing facilitator training, and institutionalizing experiential learning techniques. The article's conclusion highlights important avenues for additional research, including the necessity of empirical studies to evaluate long-term effects.

Keywords: peace education, activity-based training, youth, experiential learning, Sri Lanka, peacebuilding

1. Introduction

Particularly in nations impacted by violence and social division, peace education has become a prominent area within education and peacebuilding studies. From a broader conceptual perspective, peace education aims to provide people the information, abilities, attitudes, and values needed to stop violence and encourage harmonious coexistence. [1] It encompasses transformative methods that promote critical thinking, empathy, and engaged citizenry in addition to formal education. [2] In this way, peace education is a long-term social investment meant to promote enduring peace rather than just a pedagogical strategy.

An expanding collection of research emphasizes the significance of participatory and experiential teaching methods in fulfilling the goals of peace education. Conventional lecture-based techniques have come under scrutiny for their inadequate effectiveness in shaping attitudes and behaviors associated with conflict and reconciliation. [3] In contrast, activity-driven training, incorporating approaches such as role-plays, simulations, and collaborative problem-solving has been recognized as a more effective way to engage learners in substantial reflection and discussion. [4] These techniques foster interactive learning environments where participants can investigate various viewpoints, cultivate empathy, and practice conflict resolution skills in safe settings.

Activity-based techniques' theoretical underpinnings enhance their applicability in peace education. According to the Contact Hypothesis, when circumstances like equal status and common objectives are available, organized interaction between members of various social groups can lessen prejudice and enhance intergroup interactions. [5] Transformative Learning Theory also highlights the need of critical reflection in transforming deeply held ideas and presumptions, allowing people to embrace more inclusive and non-violent viewpoints. [6] When combined, these frameworks offer a solid conceptual foundation for comprehending how activity-based training may influence learners' attitudes and behaviors.

Despite advancements in theory and pedagogy, the effectiveness of activity-based training in peace education is still not thoroughly analyzed in various contexts. Although global research highlights its potential, there is a lack of critical synthesis regarding how these approaches operate within particular socio-political settings, especially in post-conflict areas. Factors such as historical grievances, political dynamics, and cultural sensitivities are significant in influencing both the implementation and results of peace education programs. [7] Consequently, there is a need for analyses that are grounded in context, moving past broad assumptions to investigate how activity-based training functions in real-world settings.

Sri Lanka provides a relevant and underexplored context for such an inquiry. In the aftermath of nearly three decades of protracted civil conflict, the country has engaged in various reconciliation and peacebuilding efforts, with education identified as a key mechanism for long-term social transformation. [8] Youth, in particular, are often positioned as central actors in these processes due to their potential to influence future societal norms and intergroup relations. [9] Consequently, numerous peace education initiatives implemented through civil society organizations, universities, and schools have incorporated activity-based training to engage young people in dialogue and reconciliation processes.

Despite this, the body of research on peace education in Sri Lanka is still dispersed and limited in scope. Relatively little attention is paid to a systematic evaluation of pedagogical techniques like activity-based training, with the majority of research concentrating either on policy-level analysis or on specific program results. Furthermore, there is a dearth of critical synthesis that looks at how these strategies work in formal, informal, and community-based adolescent engagement contexts. This gap is important because better design and execution of peace education programs depend on an awareness of the advantages, disadvantages, and contextual difficulties of activity-based training.

This study fills the gap by offering a critical analysis of the body of research on activity-based training in youth peace education, with a particular emphasis on Sri Lanka. The study's objectives are to summarize important discoveries, assess the efficacy of activity-based strategies, and pinpoint the potential and problems related to their application in various settings. By providing context-sensitive insights that can guide both scholarly research and useful initiatives in post-conflict nations, the paper hopes to add to the broader discussion on peace education.

With an emphasis on the Sri Lankan context, this study attempts to critically assess the function of activity-based training in youth peace education. The review specifically aims to investigate how young attitudes and actions about peace are influenced by activity-based methods, as well as to pinpoint the main obstacles and opportunities related to their application in various educational and community contexts.

To achieve this, the study is guided by the following research questions:

1. How is activity-based training conceptualized and applied in youth peace education?
2. What evidence exists regarding its effectiveness in influencing youth attitudes and behaviors toward peace?
3. What contextual challenges and opportunities shape its implementation in Sri Lanka?

This study demonstrates the value and applicability of activity-based training in youth peace education. It teaches youth about peace via practical experiences rather than abstract concepts. The results imply that by promoting empathy, collaboration, and critical thinking, these approaches might have a favorable impact on attitudes and actions. But in Sri Lanka, overcoming obstacles including scarce resources, cultural diversity, and institutional backing is essential to its success. All things considered, activity-based training may significantly contribute to the development of a more harmonious and compassionate society among young people with the correct assistance.

2. Methodology

2.1 Research Design

In order to critically assess the function of activity-based training in youth peace education, this study uses a systematic literature review approach. A systematic review improves the validity and dependability of the results by facilitating the transparent and repeatable identification, selection, and synthesis of previous research. [10] This method, in contrast to conventional narrative reviews, adheres to a methodical procedure that reduces bias and guarantees thorough coverage of pertinent material.

The review is analytical in character, concentrating on critically analyzing the theoretical underpinnings, methodological strategies, and major results of previous research in addition to describing them. This makes it possible to find trends, contradictions, and gaps in the field of peace education, especially with regard to activity-based training.

2.2 Search Strategy

For this study, a thorough search of scholarly literature was conducted to gather trustworthy and pertinent data. Several reputable electronic databases were used to ensure the assessment was as thorough as feasible. Google Scholar, Scopus, and Web of Science were the primary databases. Because they give users access to a wealth of peer-reviewed books, journal articles, and conference papers: particularly in the social sciences and education, these platforms are highly regarded.

The search process was guided by a combination of keywords and Boolean operators. The main search terms included:

‘Peace education’
‘Activity-based learning” OR “experiential learning’
‘Youth’

‘Peacebuilding’
‘Sri Lanka’
‘Post-conflict education’

To encompass a wide variety of pertinent research, these phrases were utilized in different combinations. Backward and forward citation tracking was used to find additional sources, making sure that important, significant works were not overlooked.

2.3 Inclusion and Exclusion Criteria

Certain inclusion and exclusion criteria were used in order to preserve academic rigor and concentration.

Inclusion Criteria:

[1] Peer-reviewed journal articles, books, and reputable institutional reports
[2] Studies focusing on peace education, youth engagement, or activity-based/experiential learning
[3] Research published in English
[4] Studies with relevance to post-conflict or divided societies
[5] Literature published primarily between 1990 and 2024 to capture both foundational and contemporary perspectives

Exclusion Criteria:

- Non-academic sources lacking scholarly credibility
- Studies not directly related to peace education or youth
- Articles with insufficient methodological clarity
- Duplicated studies across databases

The filtering procedure helped ensure the inclusion of only reliable and credible sources in the analysis.

2.4 Study Selection Process

The study selection process was conducted at many stages to ensure that, only essential and excellent research were included. Initially, several research publications' titles and abstracts were studied. This made it easier to determine which papers were relevant to the research question.A reduced number of scholarly articles were chosen for a full-text review following this first screening. At this point, every article was thoroughly examined to see if it satisfied the inclusion requirements and the goals of the study. Particular attention was given to studies that:

- Addressed activity-based training methods
- Examined youth participation in peace education
- Provided insights into post-conflict contexts, especially Sri Lanka

A final set of carefully picked studies was selected at the conclusion of this procedure. These studies offer a fair and trustworthy assessment of the state of the art in the fields of activity-based learning and youth peace education.

2.5 Data Analysis

Thematic analysis was used to examine the relevant studies.
This technique is used to find and comprehend recurring themes or patterns in qualitati ve data. [11]

It facilitates the clear and meaningful organization of vast volumes of data.

The analysis was carried out in three main steps:

- Familiarization - Initially, each of the chosen studies was read many times. This made it easier to fully comprehend the key concepts, claims, and conclusions made in each research.

- Coding - Important data was then found and tagged. This included important topics including youth involvement, activity-based training, and the findings of peace education. These "codes," or labels, aided in the data's classification.

- Theme Development - Finally, similar codes were grouped together to form broader themes. Some of the main themes identified included:
    1) Conceptual foundations of peace education
    2) Effectiveness of activity-based training
    3) Theoretical underpinnings
    4) Implementation challenges and opportunities

This step-by-step process made it easier to compare different studies and present the findings in a structured and meaningful way.

2.6 Limitations of the Review
Despite the methodical and meticulous approach taken in this analysis, there are certain limits that need to be taken into account.

First, only English-language studies were considered in the review. This implies that,

particularly in nations like Sri Lanka, some significant research that was published in regional languages would have gone unnoticed.

Second, only previously conducted research (secondary data) served as the basis for this study. Therefore, the quality and breadth of the available studies determine the conclusions. This review may potentially be impacted by any biases or holes in the original research.

The study still offers a solid and helpful summary of the existing research in spite of these drawbacks. It provides a good knowledge of activity-based training in youth peace education, particularly in the Sri Lankan context, by combining important data from several sources.

3. Thematic Analysis and Discussion

3.1 Conceptualizing Peace Education

Eventually, the subject of peace education has grown to integrate concepts from other disciplines, including conflict studies, education, sociology, and psychology. Its primary objective is to assist individuals in forming beliefs, attitudes, and actions that promote justice, nonviolence, and peaceful approaches to problem-solving. In the past, peace was frequently defined as the absence of direct violence or conflict. Newer methods, however, take a more comprehensive approach to peace. These include the need to address more fundamental problems like prejudice, injustice, and damaging societal norms in addition to the lack of physical confrontation. This means that the focus of peace education nowadays is on both overt and covert causes of conflict. [12]

Scholars such as Harris and Morrison define peace education as a process that helps individuals gain the knowledge, skills, and attitudes needed to prevent conflict and live peacefully with others. [1] This involves establishing critical thinking skills, empathy, conversation, and respect for variety. Classrooms and official school courses are not the only places where peace education may take place. Additionally, it takes place in youth clubs, community initiatives, and informal settings where young people can gain knowledge via practical experiences. This is particularly crucial when engaging with young people since their attitudes and ideas are continuously evolving.

In this context, more interactive and participatory teaching techniques have replaced more conventional ones like lectures. Teaching pupils about peace is frequently insufficient to alter their attitudes or actions. Rather, it is now more helpful to involve kids in activities that allow them to experience and practice peaceful conduct. This is where the use of activity-based training in peace education is crucial.

3.2 Effectiveness of Activity-Based Training

The core of activity-based training is the principle of learning through active participation. It is strongly related to experiential learning, which emphasizes the value of firsthand experience and introspection. People learn best when they actively participate in an activity, reflect on what they encountered, comprehend its significance, and then apply it in real life, according to Kolb's experimental learning model. [13] This might involve group talks, role plays, problem-solving exercises, and simulations in peace education.

According to research, these techniques are particularly successful in assisting participants in comprehending difficult concepts like empathy, collaboration, and conflict resolution. Young people are more inclined to voice their thoughts, listen to others, and consider other points of view when they participate in interactive activities. These activities also create a safe and supportive environment where participants to explore diverse perspectives and challenge existing biases. [14]

The fact that activity-based training has a greater influence on attitudes and behaviors than conventional lecture-based techniques is another benefit. Youth who are actively involved feel more accountable for their education and are more driven to use what they learn in their everyday life. In order to create lasting peace, this sense of ownership and involvement is crucial.

However, a number of variables affect how well activity-based training works. The facilitator's abilities and background are crucial since they direct conversations and guarantee a polite and safe atmosphere. Additionally, the activities must be pertinent to the participants' experiences and local context. The program's duration is also important. Short-term activities could make you feel positive right away, but they might not result in long-term behavioral change. Programs that are ongoing and long-term are better at producing profound and long-lasting effects.

Considering all factors, activity-based training is an effective instrument for peace education, but in order to have significant and long-lasting effects, it requires careful design, expert facilitation, and continuous support.

3.3 Theoretical Foundations of Activity-Based Peace Education

The use of activity-based training in peace education is supported by several important learning theories. These theories help explain why interactive and experience-based methods are effective, especially when working with young people from different backgrounds.

One of the main theories behind this approach is experiential learning theory [13], which is one of the key ideas underlying this strategy. According to this view, direct experience is the most effective way for people to learn. Rather than only listening to lectures, students engage in a cycle of performing an activity, reflecting on what transpired, comprehending the significance of that experience, and then using what they have learned in novel contexts. This might include problem-solving exercises, role plays, and group discussions in peace education. For instance, when young people engage in cooperative group activities, they experience trust-building in a real-world setting in addition to learning about collaboration. They learn the value of peaceful connection by thinking back on these activities.

Social learning theory [15] is another significant theory. According to this view, humans pick up knowledge via social interaction and observation of others. Young people who participate in activity-based peace education frequently work in groups where they witness positive behaviors including collaboration, respect, and listening. Participants are more inclined to emulate these behaviors when they witness them. Positive habits may be practiced and reinforced in a safe environment created by group activities.

Transformative learning theory [16] which focuses on how critical thinking may help people alter their firmly held assumptions and ideas. This is crucial in the context of peace education as many conflicts stem from ingrained biases and attitudes. Participants are prompted to examine alternative viewpoints and challenge their own beliefs via discussion, narrative, and shared experiences. More inclusive, sympathetic, and open-minded thinking may result from this procedure.

When taken as a whole, these ideas demonstrate the effectiveness of activity-based approaches in youth peace education. They assist young people alter their attitudes and actions in addition to gaining information by combining experience, observation, and introspection. The application of interactive and participatory techniques to create a society that is more understanding and peaceful is supported by this solid theoretical framework.

3.4 Youth Engagement in Peacebuilding

It is becoming more widely acknowledged that youth are active participants in peacebuilding efforts rather than only recipients. In order to promote long-term social cohesiveness and stop violence from happening again, their involvement in peace education programs is crucial. [17]

Because activity-based training is interactive and participative, it is especially well-suited for young involvement. Young people's developmental requirements are met by it, since they frequently react better to dynamic and interactive learning environments.

According to research, young people who take part in organized peace education programs show better communication skills, more tolerance, and a stronger desire to get involved in community projects. [18] But genuine involvement calls for more than just participation, youth voices must be included in the planning and execution of programs.

Regardless to these benefits, there are also challenges, such as constrained access to resources, a lack of institutional support, and sociopolitical limitations that may limit youth participation in certain instances.

3.5 Activity-Based Peace Education in the Sri Lankan Context

Sri Lanka’s post-conflict situation offers an important setting to understand how activity-based training can support youth peace education. After the end of the civil war in 2009, the country began focusing more on rebuilding relationships between communities that had been divided for many years. As a result, many programs were introduced by both the government and non-governmental organizations to promote reconciliation, social harmony, and better understanding among different ethnic and religious groups.

Activity-based training is one of the main strategies employed in these initiatives. These initiatives actively engage youth in shared experiences rather than only imparting theoretical knowledge about peace. For instance, children from all backgrounds participate in team projects, sports, cultural exchange programs, and group debates. Through these activities, misconceptions may be dispelled and young people can engage in more open and natural interactions. When they collaborate, they start to see each other beyond their shared ethnicity or religion, which fosters empathy and trust.

Yet there's no guarantee that these programs will be sustainable. The Sri Lankan environment still presents a number of difficulties. In certain instances, political factors still affect how people view one another, and ethnic conflicts have not entirely subsided. Community gaps are also caused by disparities in access to economic and educational opportunities. Additionally, it is more difficult for young people to

routinely connect with members of other communities due to language obstacles, particularly between Sinhala and Tamil speakers, and the existence of different schooling systems.

Despite these challenges, research indicates that, with careful planning, activity-based initiatives may contribute significantly to peacebuilding. Long-term, inclusive, and culturally sensitive programs typically have a greater impact. These programs can bring about long-lasting change and empower youth to actively contribute to a more harmonious and cohesive Sri Lanka by engaging communities and honoring regional customs.

4. Conclusion and Implications

4.1 Conclusion

This study set out to critically examine the role of activity-based training in youth peace education, with a particular focus on its relevance within the Sri Lankan context. Rather than treating peace education as a narrow concept limited to the absence of violence, the study approaches it as a broader, evolving field that engages with issues of social justice, inclusion, and long-term conflict transformation. [1,12] By drawing on a systematic review of existing literature, the analysis situates peace education within a multidisciplinary framework, highlighting how its goals and methods have expanded over time to respond to complex social and political realities.

One of the central findings of this study is that activity-based training represents a highly effective pedagogical approach within peace education. Unlike traditional teaching methods that often rely on passive learning, activity-based approaches emphasize participation, engagement, and reflection. These methods are grounded in experiential and transformative learning theories, which suggest that individuals learn more effectively when they are directly involved in the learning process. Through activities such as role-playing, group discussions, simulations, and problem-solving exercises, young people are encouraged to engage with real-world issues in meaningful ways. This not only enhances their understanding of conflict and peace but also helps develop critical skills such as empathy, communication, dialogue, and conflict resolution. [13,16]

Meanwhile, the study does not overlook the limitations of activity-based peace education. The review reveals that its effectiveness is uneven and often shaped by a range of contextual factors. These include the quality of program design, the skills and experience of facilitators, and the broader socio-political environment in which the

programs are implemented. In the Sri Lankan context, these challenges are particularly evident. While activity-based initiatives have played a role in post-conflict reconciliation efforts following decades of civil conflict, their impact has been constrained by persistent structural and cultural barriers. Ethnic divisions, language differences, and unequal access to educational and economic opportunities continue to shape the experiences of young people, limiting the transformative potential of peace education programs.

4.2 Theoretical Contributions

Despite these limitations, the research contributes significantly by combining several literary threads on youth engagement, experiential learning, and peace education into a logical analytical framework. In order to explain how activity-based training might mold attitudes and behaviors connected to peace, it reaffirms the applicability of experiential, social, and transformational learning theories. More significantly, it highlights the necessity for context-specific methods and contradicts the inclination to view peace education as a generally successful solution.

In this sense, the study emphasizes how crucial it is to modify peace education programs to fit the unique circumstances of post-conflict cultures like Sri Lanka. It offers a more detailed understanding of how activity-based techniques work in various socio-political contexts by fusing local experiences with global theoretical concepts. This viewpoint is especially crucial in a nation whose social connections are still impacted by institutional injustices, identity politics, and historical grievances.

4.3 Policy and Practical Implications

The findings of the study also point to several important implications for policymakers, educators, and practitioners. First, there is a clear need to institutionalize activity-based approaches within both formal and non-formal education systems. Incorporating experiential learning methods into school curricula and community-based programs can make peace education more engaging and impactful. Second, the success of these initiatives depends significantly on the capacity of facilitators. Well-trained facilitators are essential for creating safe and inclusive learning environments, guiding discussions, and ensuring that activities lead to meaningful reflection. Therefore, investing in facilitator training and capacity-building should be a key priority.

Third, inclusive programming that unites young people from many ethnic, linguistic, and religious backgrounds is desperately needed in Sri Lanka. These programs can foster communication and understanding amongst people and aid in bridging societal differences. The research concludes by stressing those short-term treatments are insufficient to bring about long-lasting transformation. Long-term engagement

techniques that enable behavioral change over time and reinforce learning objectives are necessary for sustainable peace education.

4.4 Directions for Future Research

Whilst this study offers a comprehensive review of the body of available literature, it also points out a number of gaps that require more research. In order to better understand the long-term effects of activity-based peace education on adolescent behavior and community dynamics, future research should concentrate on producing empirical evidence through primary data gathering. More context-specific research in Sri Lanka is also required to look at how institutional, political, and cultural aspects of the country affect the efficacy of programs. Further insights into what works, for whom, and under what circumstances may be obtained by comparative studies conducted across various communities and regions.

In conclusion, future studies should investigate the possibility of incorporating cutting-edge and digital learning resources into activity-based peace education as educational environments continue to change. This is especially important in a society that is changing quickly and where technology is increasingly influencing how youth engage and learn.

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Chapter 7: Testimonio, Poverty, and Structural Inequality: A Reading of I, Rigoberta Menchú

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Abstract

I, Rigoberta Menchú: An Indian Woman in Guatemala stands as a landmark work in the Latin American testimonial literature tradition. This text centers on the experiences of indigenous groups who are marginalized through systemic poverty and inequality. The testimonio style used in I, Rigoberta Menchú goes beyond just being a personal story; it represents the shared experiences of many people to highlight the history, economy, and politics that lead to the unfair treatment of indigenous groups in Guatemala. This paper aims to analyze I, Rigoberta Menchú as a testimonial discourse conveying a message about the structurally violent conditions that engender experiences related to poverty and inequality. By using testimonio studies, subaltern studies, and theories of structural inequality, this research closely examines how Menchú's storytelling techniques, like sharing collective memories, using oral traditions, and witnessing political events, challenge the main historical stories that ignore the voices of marginalized people. By foregrounding indigenous agency and lived experience, I, Rigoberta Menchú demonstrate the transformative potential of testimonial storytelling.

Keywords: Inequality, Poverty, Rigoberta Menchú, Testimonio

1. Introduction

Latin American literature has historically been a crucial space for negotiating histories of oppression, resistance, and survival, especially for groups who have been formerly excluded from dominant discourses of history. Testimonio, a type of literature created because of these histories of exclusion, is important in these literary traditions that focus on real experiences, shared memories, and political issues. I, Rigoberta Menchú: An Indian Woman in Guatemala, published in 1984 and told through testimony edited by Elisabeth Burgos-Debray, has been one of the most influential works of testimonio

literature of the latter half of the twentieth century. This text inscribes the lived experiences of indigenous Maya groups of Guatemala, not only to highlight their colonial histories but also to make apparent their consequent histories of poverty and inequality.

In I, Rigoberta Menchú, the testimony form exhibits no concern for self-fashioning or personal accomplishment, which contrasts with traditional autobiography as practiced in Western literary forms. It is a collective story that has the speaker situating herself within a larger framework that includes that of her family, her people, and so forth. This method is crucial to testimonio as a type of writing and activism, where simply sharing experiences of suffering isn't enough; it aims to demand acknowledgment and justice from the reader, who is placed in a specific moral connection by these stories.

The text does not portray poverty and inequality as isolated or accidental phenomena. Instead, the text portrays both poverty and inequality as the systematic outcome of land expropriation, forced labour, racial hierarchies, and state violence. Hunger, lack of education, dangerous labor conditions, and the lack of basic human dignity as a right are all pervasive in the narrative, indicating how poverty subsumes the daily lives of indigenous communities. However, the text depicts the inequality as structured on multiple levels of class and ethnicity, particularly the dominance of Ladino elites over indigenous communities.

This paper contends that I, Rigoberta Menchú represents a defining example of the testimonio genre, transforming private experience into a socially engaged form through the testimonial mode. Through the application of the lens of poverty and inequality, the paper illustrates how testimonio constitutes the voice of the Voiceless as it becomes the counter-narrative of the canonical history, laying bare the structural inequality, while at the same time, correlating the social and the cultural by placing the natives in the driver’s seat as the protagonists of history.

2. Research Problem

Although I, Rigoberta Menchú is widely recognized globally as an important testimonial text that helped establish the foundations of testimonial literature, critical analysis of the work has been heavily influenced by debates over authenticity, representation, and truth. Although these issues have contributed to important debates about representation and authorship, they should not divert critical analysis of the text from exploring its treatment of poverty and inequality as structural conditions, since this aspect of the text often is overlooked.

Another important issue exists in the tradition of downplaying indigenous culture within mainstream discourses of literature and history. The conventional form of Latin American literature tends to focus on upper-class subjectivities, placing greater

importance on written culture, making it harder to see the importance of oral cultures. On this issue, testimony breaks down conventional models of Latin American literature to provide greater voice to those cultures ignored in mainstream history. Nevertheless, this particular challenge of testimony to mainstream models of literature has not been fully investigated in relation to issues of poverty.

In addition, the problem of poverty itself is often considered, in textual studies, a subjective condition of either an individual or a description, but rarely a result of structural violence. In I, Rigoberta Menchú, the issue of poverty is, in effect, impossible to dissociate from land alienation, working conditions, and racist modes of governance. Without these relationships, the text's testimonial power would lose its meaning.

The research problem that problematizes and occupies the center stage of this paper is that of the literary problem of a lack of a unitary literary study that highlights and focuses on the reality of inequality and poor conditions in the form of testimonio.

3. Research Objectives

The primary objective of the research is to explore the testimonial text I, Rigoberta Menchu, wrote as the voice of poverty and inequality of the indigenous communities of Guatemala through the theoretical lens of testimonio and the subaltern studies approach and explore the role of the literary text as political intervention.

Specific research objectives are the following:

1 The research aims to examine the formal and thematic qualities that emerge in I, Rigoberta Menchu as a result of this process.
2 The research also aims to analyze the theme of poverty as a lived experience in the narrative and how intersecting structures of class, ethnicity, and power play out inequality.
3 The research also aims to situate the text within a broader discourse on voice, representation, justice, and the subaltern.

4. Research Methodology

A qualitative and interpretive approach, suitable for literary critique with a focus on the humanities, underpins this research. Close reading and analyzing the text are key parts of this research, which relies on ideas and contexts mainly taken from literary studies, subaltern theories, and social justice studies. I, Rigoberta Menchú functions simultaneously as a literary text and a social justice document, requiring both close reading and contextual analysis to interpret its multiple layers of testimonial narrative.

The text available for analysis is I, Rigoberta Menchú: An Indian Woman in Guatemala (1984), spoken by Rigoberta Menchú and compiled by Elisabeth Burgos-Debray. This

study interprets the book as a testimonio, a type of autobiography that is primarily socially engaged, oral in nature, and politically committed. We closely analyze specific events in the autobiography about poverty, exploitation, land expropriation, or ethnic discrimination.

Secondary sources consist of literature like books, articles, and crucial essays regarding testimonio studies, indigenous literature, poverty, inequality, and structural violence. These sources help create a necessary framework for interpreting Menchú's narrative within the context of academic discourses. This paper relies on pre-existing crucial literature by authors like John Beverley, Gayatri Chakravorty Spivak, Doris Sommer, Georg Gugelberger, and Paul Farmer to create its framework.

The analysis undertaken in this essay is thematic and interpretive in nature. We employ themes like poverty, inequality, collective identity, resistance, and ethical witnessing as analytical tools to unpack the text. Rather than ascertaining the truthfulness of this narrative, this inquiry looks into its representational value instead. In doing so, this analysis espouses inquiry that looks at contemporary stylistics in literary analysis in recognizing testimonio as a genre that makes truth conditional upon experience and moral testimony instead of factual testimony. In this manner, this analysis aims to establish how testimonio is a powerful narrative form of expressing both poor and inequitable conditions from a marginalized position.

5. Theoretical Framework

The current study operates within a broad theoretical paradigm that integrates ideas from the theories of testimonio and subaltern studies, as well as theories of structural poverty/inequality. The theoretical approaches can be seen to work cumulatively in allowing a critical textual approach to I, Rigoberta Menchu as a literary text as well as a political act of recording the experiences of the poor in terms of structurally mediated poverty/inequality. Instead of considering the text as a typical autobiography, it can be said to be a performative act of ethical witnessing that voices the structure of suffering as encoded in the discourses of the powerful.

At the center of this framework is testimonio theory, most notably formulated by John Beverley. According to Beverley, testimonio is a narrative mode marked by a first-person voice that speaks not only for a personal individual but also for a collective subject articulated from the very condition of oppression, crisis, and urgency. In contrast to the traditional modes of literature, testimonio emphasizes political engagement and ethical responsibility (Beverley, 2004). It challenges the division between literature and social reality. Instead, testimonio argues for the impossible and necessary task of the impossible fusion of the narratives and the lived experience. Testimonio is thus a counter-discourse that challenges the dominance of the historian and the formation of literature.

I, Rigoberta Menchú reveal that the autobiographical genre is subverted in that the individual subject is replaced with a collective consciousness in a way that is accomplished through a theoretical framework provided by Beverley. It is possible to investigate the way in which I, Rigoberta Menchú subvert the autobiographical genre in that the individual subject is replaced with collective knowledge of history because of the theoretical framework that Beverley provides. In I, Rigoberta Menchú, the autobiographical genre is subverted in that a political subject is created to address a specific cause.

To complement the theory of testimonio, the researcher will also depend upon the related discipline of subaltern studies and the work of Gayatri Chakravorty Spivak. The famous essay “Can the Subaltern Speak?” raises questions about the ways in which the voices of subalterns can be allowed to speak through the dominant knowledge regimes. But the voices of the subalterns get mediated and translated in ways that may be problematic and they may perpetually reinscribe the power relations that silence the subalterns (Spivak, 1988). This is very important when we think about the case of I, Rigoberta Menchú which got constructed through the process of collective writing and translation.

Instead of seeing mediation as a constraint that compromises the authenticity of the testimonio, this work sees mediation as a politically complex but productive act. In fact, as the oral subaltern narratives of the indigenous are translated into a globalized written text, they are then able to enter global political discourse despite their subaltern experiences of poverty, violence, or dislocation. Even as it acknowledges the contention of Spivak regarding representation, however, this work contends that the testimonio of Menchú strategically navigates mediation to render its subaltern experience of suffering as that which appears on the margins of historical narratives.

A discussion of the theory of structural poverty and inequality, particularly Paul Farmer's concept of structural violence, can also support the theoretical framework. Farmer describes structural violence as a kind of social organization that systematically does harm to some people by depriving them of their basic needs. Farmer states that the problem of poverty and suffering should not only be looked at in terms of human error but also from a perspective of unequal structures that have been historically constructed (Farmer, 2004). The above view is very important for understanding the narrative of Menchu, because she relates poverty consistently to the loss of the means of subsistence, exploitative labor patterns, racism, and government-sponsored violence.

Menchú's story reveals that poverty in indigenous communities in Guatemala is not a temporary or accidental condition, but rather a deeply ingrained structural issue. The displacement of indigenous peoples, the use of forced labor in plantations, the banning of indigenous languages and cultural practices, and the military power of the state: all

of these are deeply intertwined in the function of mechanisms of exploitation, in the use of structural violence described in Farmer's work. In a structural violence framework, poverty is not a condition but a form of violence.

The incorporation of the theories of testimonio, subaltern studies, and structural analyses of poverty enables an investigation into the critical aspects of resistance rather than a mere descriptive analysis of the phenomenon of suffering, because, through the critical lens, an understanding of the Sojourners' protest against oppressive systems of power is achieved. I, Rigoberta Menchú is not only a reflection of pain but an intervention as well, because the text provides an account of suffering while at the same time proclaiming an assertion of agency, particularly among the indigenous group of people.

In synthesizing these theoretical approaches, this framework argues that I, Rigoberta Menchú must be understood as part of a larger tradition of resistance Literature, defined by its interweaving of narrative, memory, and politics. The text is thus understood as an act of ethical witnessing that resists dominant power relations while affirming the possibility of subaltern speech even within limiting conditions. This theoretical framework is critical for understanding the complex interrelation between individual voice, collective history, local suffering, and global political engagement as represented through the text as both literary and political discourse on poverty, inequality, and indigenous resistance.

6. Literature Review

There has been a tremendous deal of academic engagement with I, Rigoberta Menchú, to the point where literary critique, anthropology, and political science, as well as literature on human rights, have come into play. From its earliest publication, the text was located not only in terms of the literature within the Latin American testimonio genre but also in terms of its engagement with indigenous rights and political violence around the globe. The primary location of academic engagement with the text via testimonio has to do with genre, politics of representation, authorship, and the ethical content of speaking on behalf of suffering. Its content shows limited engagement with the structural aspects of poverty and inequality.

This literature review examines the overarching themes and discussions in the literature on testimonio, I, Rigoberta Menchú, the voice of the subaltern, and socioeconomic injustices. This research examines the significance of socio-economic issues, such as poverty and inequality, in I, Rigoberta Menchú, while situating its investigation within the framework of existing scholarship and highlighting the gaps that underscore its relevance.

6.1 Testimonio as a Literary or Political Discourse

The idea of testimonio has evolved in theoretical approaches in Latin American literary studies in connection to the political imperative and collective function. Among the most outstanding works in the theoretical formulation of testimonio is Testimonio: On the Politics of Truth, a 2004 book by John Beverley. According to Beverley, testimonio is "a first-person narrative told by a witness who speaks not only as a singular subject but also as a spokesperson for a collectivity constituted by the experience of oppression." (Beverley, 2004, p.30) The authority of testimonio is thus neither found in aesthetic sophistication nor in the rhetorical harmony of the story but in the political act and ethical mandate to the reader.

Beverley underscores the ways that testimonio subverts the dominant literary paradigm through its prioritization of the lived experience rather than its representation in a fictional format. On this level, testimonio defies assimilation into the dominant paradigm of literature and therefore exists as a site of intersection between literature and history and activism. This aspect of testimonio is important to recognizing the purpose of I, Rigoberta Menchú.

Georg M. Gugelberger, in The Real Thing: Testimonial Discourse and Latin America, similarly conceives testimonio as a counter-discourse to hegemonic narratives of history and culture. Gugelberger situates testimonio within a broader tradition of oral storytelling and popular resistance, contending that it acts as a corrective toward elite, state-sponsored, and colonial historiographies. He emphasizes ethical commitment to social justice and serves as a mode of political intervention rather than a purely literary artifact. (Gugelberger, 1996)

Working together, Beverley and Gugelberger establish the testimonio as an explicitly political narrative form emanating from and encoding collective struggle and social injustice. With oppression and resistance, the most frequent foregrounding concepts in their work, poverty and inequality remain mostly implicit rather than analytically foregrounded. The present study builds upon their theoretical insights, advancing the discussion by incorporating socio-economic injustice not merely as a contextual backdrop, but as a structural force within the testimonial narrative itself.

6.2 Critical Responses to I, Rigoberta Menchú

Since its release, the book I, Rigoberta Menchú has been the subject of much academic debate. While initially hailed as a significant statement of indigenous defiance and a key text within the global human rights movement, the work also became the object of considerable controversy. In her work on testimonial literature, Doris Sommer's definition of the 'plural self' explores the anti-individualist stance of the testimonios. In

Menchú's account, according to Sommer, the spoken 'I' is a collective one that is based on a communal ethnicity, culture, and politics. (Sommer, 1988)

Controversies surrounding the text's authorship, mediation process, and truth have also implicated it. Questions about Elisabeth Burgos-Debray's involvement in documenting and finalizing Menchú's text through their mediation or editorial process sparked these debates. These controversies resurfaced when suggestions were made regarding unverifiable events occurring in the text. These debates evaluated the text based on Western standards of fact, disregarding the logic inherent in the genre of testimonio, which encompasses its definitions of fact and fiction as well as its constructed notion of truth.

As a consequence, Beverley and others advocating for the genre have stated that the prominence of empirical verification could jeopardize the politics of testimony. Specifically, Beverley argues that the relevance of I, Rigoberta Menchú does not lie in the consistency of the work with a notion of truth promoted by the ideal of positivism but rather in the work's ability "to articulate the systemic injustice and the socio-cultural suffering." (Beverley, 2004, p. 72)

Although such debates have proven fruitful for understanding the issues that concern the authority and ethics of narratives, the fact remains that such debates have served as a distraction for explorations of poverty and inequality as thematic issues and structural concerns. This particular study takes a stance that aligns with the views of certain critics and argues the point further as it applies to the role of socio-economic deprivation as a key concern of the narrative logic at work.

6.3 Poverty and Inequality in Literary and Social Theory

Both poverty and inequality have been traditional preoccupations for sociologists, economists, and political thinkers, especially from a Marxist, postcolonial, or development studies perspective. Each of these fields conceives of poverty less as a problem of the poor but as a problem of power relations, of exploitation in work relations, and of historical displacement. Conversely, in literary criticism, the problem of poverty has tended to be conceived more as a background problem or as a social context for a literary narrative.

"Pathologies of Power," written by Paul Farmer and published in 2003, is a critical work that presents a conceptual toolbox that can be employed to fill the above-mentioned gap. The author formulates the concept of "structural violence," which identifies that the condition of poverty is sustained and created as a result of certain political and economic structures that are unfavorable for some groups of people.

This framework of Farmer is particularly relevant to I, Rigoberta Menchú, where hunger, land dispossession, forced labour, and economic exploitation recur throughout the narrative. These are not singular events but symptoms of entrenched structural inequality dealt to indigenous communities in Guatemala. Farmer's approach allows for a reading of Menchú's testimony that situates personal suffering within broader systems of economic and political domination. (Farmer, 2003)

Postcolonial theory further deepens this analysis by bringing to light the continuing impact of colonialism on contemporary inequality. It has been shown that colonial policy on land, racial hierarchies, and extractive economies continue into the present and ensure that the indigenes in Latin America remain marginal. Viewed from this perspective, Menchú's testimony is a denunciation of both colonial and neocolonial structures that have created poverty and exclusion.

Despite these theoretical advances, there is a large gap in literary studies that seeks to combine structural theories of poverty with textual analyses of testimonial narratives. This paper aims to address this gap by placing a focus on poverty and inequality as key interpretive frameworks for literary analyses of Menchú's testimonio.

6.4 The Subaltern Voice and Indigenous Representation

The concept of subaltern studies is a further theoretical lens for the deconstruction of the meaning of 'I, Rigoberta Menchú.' The paper, 'Can the Subaltern Speak?' by Gayatri Chakravorty Spivak, (Spivak, 1988) first delivered within the context of a 1988 conference at Villa Mondragon in the University of Rome, is a highly influential intervention in this debate that examines the possibility of the subaltern voice being articulated within the dominant tradition.

Such skepticism is especially pertinent in the context of Menchú's testimony, which is recorded, edited, and distributed through global literary and political circuits. There is a question whether it attenuates the authoritative quality of the voice of the subaltern. Nevertheless, it has been suggested that testimony provides a partial answer to Spivak's question, as it generates a space —albeit an imperfect space —that is available for the entry of the subaltern into public discourses, through which the subaltern may speak.

Menchu's story relies to an extent upon oral tradition and indigenous modes of knowledge, thus questioning the Western hierarchical structure of knowledge that emphasizes written, individualized, and elitist knowledge. The group "I" that characterizes the narrative refuses to be subsumed within traditional modes of autobiography that privilege dominant modes of self-expression.

6.5 Research Gap and Critical Positioning

Although the scholarship on testimonio and on I, Rigoberta Menchú can be said to be extensive, this critical work remains fragmented in its engagement with socio-economic injustice. A good deal of the published criticism foregrounds issues of representation, authenticity, gender, or of political symbolism, with poverty and inequality being ancillary or contextual background rather than informing analytics.

The present study positions itself at the intersection of testimonio theory, subaltern studies, and structural poverty analysis. The strength of having placed poverty and inequality as determining structural, thematic, and narrative forces lies in the literary reading that reiterates testimonio as an enabling genre in the representation and resistance against unjust systems. As such, this work contributes to the ongoing debates by shifting critical attention away from questions of verisimilitude toward the more profound socio-economic realities articulated through Menchú's testimonial voice.

7. Discussion and Analysis

7.1 Testimonio as a Collective Voice

This is perhaps because one of the most salient features of I, Rigoberta Menchú is the insistence on a voice that is collective and has finally been spoken. Although the narrative is relayed through first-person narration, the "I" in Menchú's text does not function as an independent or autonomous subject. Menchú makes it clear from the beginning that her story is not only hers but also representative of the life experience of Guatemala's indigenous people en bloc. She explicitly clarifies that her personal history must not be considered separately from the collective history of her community and thereby frames the testimonial voice as representative rather than singular. (Menchú, 1984)

Menchú consistently frames her personal experience in a communal manner. While describing child labor in coastal plantation sectors, she did not point to her own experience as something extraordinary but constantly underscored that this experience was similar to that of other children and families from indigenous backgrounds. The problems of extended working hours, poor payment, and exhaustion in this text are not reported in a personal manner but are a common occurrence, and it leads to a blurring between personal and historical experience in a manner consistent with John Beverley’s understanding of testimonio: a discourse that speaks in a collective 'we,' generated by experience and presence under a common oppression rather than from a private interiority. (Beverley, 2004)

The use of the narrative voice is very fluid between the use of” I” and” we” in most instances when narrating the topics of rituals, displacement, or resistance. The fluid use of the voice is not only stylistic; rather, in most indigenous ways of knowing, the use of the collective is embedded in the memories of the people. The use of the collective in

narrating events reinforces the notion that memory is collective. This challenges the dominant Western narrating convention of individual ownership of the writing. (Menchú, 1984)

Through the highlighting of a collective experience, the testimonio by Menchú resists the fragmentation of indigenous life as dictated by either the colonizers or the state. Now, we can view an individual's suffering as a manifestation of a broader pattern of structural injustice that the community faces. Through this mechanism, the narrative reclaims discourse for the marginalized, challenging the narratives that have silenced the indigenous voice in state histories.

7.2 Poverty as Represented Lived Experience

In I, Rigoberta Menchú, poverty is represented not as an exceptional experience of hardship but as a normalized one that frames the experience of the Maya from early childhood. "Sometimes we didn't even drink enough to satisfy our thirst." (Menchú, 1984, p. 22) These are specific experiences of hunger that are also repeated in aggregation in Menchú's accounts; she remembers that "even when we worked hard, we didn't always have enough to eat." (Menchú, 1984, p. 123)

Living conditions in the homes further demonstrate the reality of poverty and its various dimensions. Thus, regarding indigenous dwellings, it can be noted that they were insecure, crowded, and exposed, according to Menchú's description. Regarding education, indigenous people's access was highly limited, according to the testimony's description of their situation. "Survival meant working in the countryside, in the fields, and on plantations. So, many children couldn't go to school, and therefore, many people in Guatemala couldn't read and write" (Menchú, 1984, p. 122), according to Menchú's testimony, indicating the structural root of illiteracy in economic conditions and not individual deficiency.

Over and over, the narrative denies any theories that explain poverty in terms of individual incompetence or cultural inadequacy. Menchú places deprivation within the exploitative systems of labor that continue to enrich Ladino landowners while denying indigenous workers a living wage. Work on plantations is backbreaking, low-paid, and inhumane; in fact, indigenous families can hardly survive on salaries earned from plantation labour despite the value produced. (Menchú, 1984)

The narrative is the very powerful representation of what Paul Farmer describes as structural violence, where social and economic configurations systematically cause harm to the most marginalized. (Farmer, 2003) In Menchú's narrative, poverty acts as a kind of invisible violence, less spectacular than military repression but equally effective in the molding of life chances and the reproduction of inequality. It is hunger,

illness, and lack of education that emerge as the result of institutionalized exploitation rather than natural conditions.

Through storytelling the poverty becomes a common experience that continues to be shared. Through such a story, poverty is politicized as a result of the pressure of history, rather than a matter of individual circumstances. Through such a story, personal experiences are transformed into evidence that critiques the oppressive structures allowing poverty to persist.

7.3 Structural Inequality and Land Dispossession

Land dispossession appears to be one of the important elements in Menchu's biography that gives rise to the structural inequality. Land displacement shows how indigenous peoples have been forced to leave their native land in illegitimate legal, economic, or violent ways. This expulsion results in the lack of land for sustenance; thus, these people have to resort to exploitative wages in plantations. (Menchú, 1984)

Menchú stresses that the importance of land extends beyond its monetary value. The text offers land as a symbol of cultural continuity and spiritual significance. She portrays traditional ways of crop cultivation and spiritual activities performed in relation to this resource, illustrating how displacement disrupts cultural cohesion and continuity. The loss of this resource thus entails not only deprivation but also loss of culture. (Menchú, 1984)

From a Marxist and postcolonial analysis perspective, the displacement of land is a tool for the ruling classes. The ownership of land is a determinant for the right to produce and, by connection, the right to political power and security. In I, Rigoberta Menchú, land ownership is reclaimed by the Ladino in a legal system promoted by the state, while indigenous rights to land are denied in the report.

The text strips away the discourses that make the unequal status quo seem natural by tracing the sources of economic woes back to the loss of land. It thus illustrates that indigenous poverty is the product of historical agency rather than the lack of indigenous cultural or economic acumen. The testimonio, therefore, lays bare the historical causal relationship between land theft and the structural underpinning of exploitation.

7.4 Ethnicity, Class, and Power

Inequality, as portrayed in the story of I, Rigoberta Menchú, is enacted through the crossing of ethnicity and class. While the marker of "indigenous" is visibility, the impact of that status, as disclosed through Rigoberta's narrative, is felt in access to education, employment, the law, and politics. Rigoberta speaks of the discrimination

against the indigenous through insult, exploitation, and violence, all of which are founded on racial dominance. (Menchú, 1984)

Language serves as a particularly powerful means of exclusion. Menchú tells how people who spoke no Spanish were regularly deceived, silenced, or robbed of justice in legal and bureaucratic settings, and this linguistic exclusion reinforces what Gayatri Chakravorty Spivak defines as the status of subalternity, being structurally deprived of voice in dominant structures of power. (Spivak, 1988)

On the other hand, Menchú's story also establishes the validity of indigenous knowledge as an epistemology. By recording the rituals and belief systems of the Maya, Menchú disrupts the Ladino hegemony over the interpretation of history. Yet the text is very cognizant of the limitations that exist due to the power structure that the Maya are up against. Resistance is monitored and suppressed and it is repressed and brutalized by the military, indicating the inherent inequality that exists as a result of both exploitation and violence.

Menchu's descriptions of state terror, arbitrary arrests, and executions of Maya activists reveal a mechanism of power that operates through the repression of dissent and the structural perpetuation of inequality. In other words, the combination of ethnicity and class creates a system of vulnerability among the Maya population to both deprivation and repression.

7.5 Testimonio as Resistance and Ethical Witnessing

In addition to serving a representational function, I, Rigoberta Menchú, can be seen as one of resistance. The text presents the reader with poverty and inequality in terms of lived experience rather than theoretical constructs. While this can be seen to be traumatic for Rigoberta in terms of the execution of indigenous leaders, the horrors that Rigoberta has to go through—the execution of leaders and the break-up of families—are in order to remind one of their existences. (Menchú, 1984)

The moral value of the text consists in its refusal to achieve narrative closure. This is clearly conveyed through Doris Sommer’s idea of ‘plural self’ about Menchú’s text, which resists individual closure to instead place collective responsibility at the center. (Sommer, 1988) The text offers no solutions but shows that ignorance would hinder any chance of justice.

Menchu transcends suffering through her testimony, reclaiming control over her life. The narrative has become an act of political activism because marginalized voices demand to be heard. Instead of simply being documented in terms of poverty associated with inequality, these conditions have been countered by the powerful role of literature in I, Rigoberta Menchú. (Menchú, 1984)

8. Conclusion

This paper has explored the ways in which I, Rigoberta Menchú serve as a powerful example of testimonio that articulates poverty and inequality as collective, structural, and political facts. This study has demonstrated that Menchú's narrative, when contextualized within the theoretical frameworks of testimonio studies, subaltern theory, and structural inequality, transcends mere individual autobiography to serve as ethical witnessing and social critique. This analysis shows how the poverty in the text is not some kind of isolated condition but rather a systemic effect resulting from land dispossession, labor exploitation, ethnic discrimination, and state violence.

As close reading has revealed, this paper demonstrates that testimonio functions as a collective voice challenging dominant literary and historical discourses. Menchú's repeated invocation of communal experience underlines the historically rooted nature of indigenous suffering. Inequality is seen to operate in an interlinked regime of class and ethnicity, with poverty portrayed as an everyday reality in indigenous life from very early childhood. The story says that these conditions must be made known and that historical and institutional forces that keep people on the outside must be recognized.

The discussion also shows that I, Rigoberta Menchú function as an act of resistance that narratively restores agency to indigenous people. The text utilizes oral tradition and collective memory to contest epistemological hierarchies that favor elite, written forms of knowledge. Despite mediation and translation, the testimonio retains its political urgency, asserting indigenous agency within global discourses of human rights and social justice.

Ultimately, this study makes the case that testimonio remains an important literary genre for representing poverty and inequality in contexts of structural violations. I, Rigoberta Menchú, exemplify how testimonial narration transposes lived experience into collective resistance and ethical appeal. By giving expression to the voices of the marginalized, testimonio denounces injustice and calls readers to confrontation with the structures that create it. Such an analysis could be furthered by future research through comparative studies of testimonial narratives across regions or by introducing gender-focused and intersectional perspectives that continue to enrich an understanding of literature as a means for social transformation.

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Chapter 8: Punitive Practices, Attitudes, and Positive Alternatives: An Empirical Study of School Discipline in Sri Lanka

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Abstract

Corporal punishment remains widespread in Sri Lankan schools despite explicit prohibition under Ministry of Education Circular No. 2016/12 and the 2025 Penal Code Amendment (Section 308B). This persistent gap between law and classroom practice requires evidence-based solutions. Using a concurrent mixed methods design, this study examined three dimensions: the punitive disciplinary practices currently in use, teacher and student attitudes toward those practices, and the constructive alternatives capable of supporting meaningful behavioral change. Data were gathered from 100 teachers and 200 students across ten government schools in the Sri Jayewardenepura Education Zone through structured questionnaires, in-depth interviews, and focus group discussions. Descriptive and inferential statistics including independent samples t-tests, one-way ANOVA, Pearson and partial correlation, and hierarchical multiple regression were applied to quantitative data; thematic analysis was applied to qualitative data. Findings showed that the large majority of teachers continue to use physical punishment despite the legal prohibition, while students consistently preferred supportive, dialogue-based approaches. Teacher attitudes proved a stronger predictor of constructive disciplinary practice than knowledge alone, highlighting attitudinal change as an important factor in reform. These findings contribute to the growing scholarship on school discipline in South Asian educational contexts and carry clear implications for policy and practice. Educational authorities are recommended to develop a national constructive discipline framework that places attitudinal transformation at the center of teacher professional development.

Keywords: corporal punishment; teacher attitudes; constructive discipline; Sri Lankan schools; child rights

1. Introduction

Education is central to human development — not only for academic achievement, but for the emotional, social, and moral growth of young people. In Sri Lankan schools, however, punitive disciplinary practices remain common despite their well-documented harms (Gershoff & Grogan-Kaylor, 2016; Durrant, 2018). Research consistently shows that physical and psychological punishment conflicts with modern educational principles and international human rights standards.

The Sri Lankan government has taken meaningful legislative steps. The Ministry of Education formally prohibited corporal punishment through Circular No. 2016/12. In 2025, Parliament strengthened this through an amendment to the Penal Code (Section 308B), making corporal punishment a criminal offence with penalties of up to six months imprisonment, a fine of 100,000 rupees, or both. Despite these advances, the practice continues on the ground.

The National Child Protection Authority (NCPA, 2019) confirmed that physical and psychological punishment persists across many schools. Zoysa et al. (2021) found that 80.4% of students had experienced at least one form of physical punishment within a single school term. As Parkes (2015) argues, constructive discipline — grounded in mutual respect, open communication, and shared responsibility — offers a more effective and humane path forward. This study was designed to generate the evidence needed to support that transition.

1.1 Research Objectives

Three objectives guided this study:

1. To identify the punitive disciplinary practices currently used in Sri Lankan schools.
2. To examine teacher and student attitudes toward those practices.
3. To identify constructive disciplinary approaches capable of promoting meaningful behavioral change among students.

The study also explored how teacher knowledge, attitudes, and practice are interrelated, and what students consider the most effective responses to misbehavior.

1.2 Significance of the Study

This study contributes to the limited but growing body of empirical research on school discipline in Sri Lanka. It provides one of the few multi-source comparisons of teacher-reported and student-observed disciplinary practices within a single Education Zone, and quantifies the relationship between teacher knowledge, attitudes, and

behavior. By incorporating student perspectives, the study addresses an underrepresented voice in the local research literature. These contributions are particularly timely given the 2025 Penal Code Amendment and the need for evidence to guide its implementation.

1.3 Scope and Limitations

This study was conducted within the Sri Jayewardenepura Education Zone. Findings may not fully reflect conditions in other regions, particularly rural or estate sector schools where resource constraints and cultural norms may differ. The cross-sectional design captures attitudes and behavior at a single point in time. Future studies with broader geographic coverage, longitudinal designs, and direct classroom observation would strengthen the generalizability of these findings.

2. Literature Review

2.1 Theoretical Framework

Five theoretical perspectives informed this study. Skinner's (1938) operant conditioning established that positive reinforcement builds lasting behavioral change, while punishment suppresses behavior without replacing it with a better alternative. Bandura's (1977) social learning theory highlights teachers as behavioral models: coercive responses teach students that force resolves conflict, while patient dialogue conveys the opposite. Dreikurs (1968) proposed that misbehavior reflects unmet needs and that democratic classroom relationships address root causes more effectively than punishment. Glasser (1998) held that genuine behavioral change stems from internal reflection rather than external pressure or fear. Zehr (2015) argued that discipline should center on repairing harm and restoring relationships. Together, these perspectives provide a coherent rationale for moving beyond punitive methods toward constructive disciplinary practice.

2.2 Research in Sri Lanka

Several studies document the scope and impact of punitive discipline locally. Ilangasinghe (2005) found that children's rights were breached most frequently in rural schools with fewer trained teachers. Wijayalakshmi (2005) reported widespread emotional distress linked to teacher punishment and a clear student preference for alternative approaches. Menikdiwela (2020) found that teachers resort to punitive methods under the pressures of large class sizes and time constraints, not from intention alone. The NCPA (2019) study, spanning six districts, found physical punishment common and broadly regarded as effective by many teachers and administrators. Zoysa et al. (2021) confirmed these patterns across a large sample, with 72.5% of students reporting psychological distress associated with punitive discipline.

2.3 International Evidence

The international evidence base consistently supports a shift away from punitive practice. Gershoff and Grogan-Kaylor's (2016) large-scale meta-analysis linked corporal punishment to heightened aggression, anxiety, depression, and weaker teacher–student relationships. Gershoff (2002) provided an earlier theoretical review confirming these mechanisms. Durrant (2018) showed that supportive approaches are more effective and adaptable across diverse cultural contexts. Gregory and Evans (2020) found that restorative practices improve classroom climate and reduce behavioral difficulties. Rahman (2021) confirmed the feasibility of non-punitive approaches in South Asian school settings comparable to Sri Lanka, and Taylor and Wong (2019) documented meaningful behavioral and academic gains following structured intervention programs.

2.4 Research Gap

Despite the breadth of international evidence, Sri Lankan research has not yet systematically quantified the relationship between teacher knowledge, attitudes, and disciplinary behavior, nor systematically compared teacher and student perspectives on punitive practice. This study addresses both gaps, providing empirical, locally grounded data to inform policy and professional development.

3. Methodology

3.1 Research Design

A concurrent mixed methods design was adopted (Creswell & Plano Clark, 2018; Fetters et al., 2013). Quantitative and qualitative data were gathered simultaneously, analyzed independently, and integrated during interpretation (Teddlie & Yu, 2007). The quantitative strand used a descriptive cross-sectional survey; the qualitative strand drew on phenomenological inquiry to explore participant perspectives in depth (Patton, 2015).

3.2 Participants and Sampling

Ten government schools were selected from the Sri Jayewardenepura Education Zone using multi-stage stratified sampling (Cohen et al., 2018), covering urban and semi-urban settings across three school types (Type 1AB, 1C, and 2). One hundred teachers were recruited by subject department, and 200 students in Grades 9 to 11 were sampled by grade level, with gender balance maintained throughout. Sample size adequacy was confirmed against Krejcie and Morgan's (1970) guidelines and Israel's (1992) recommendations. For the qualitative component, five in-depth interviews were conducted with school leaders and senior teachers, and five focus group discussions

were held two with teachers (n = 16) and three with students across grade levels (n = 30) continuing until thematic saturation was reached (Guest et al., 2006).

3.3 Data Collection

Separate validated questionnaires were developed for teachers and students, each addressing demographics, disciplinary experiences, attitudes, and preferences for alternative approaches. Both instruments underwent expert review and pilot testing. Semi-structured interview and focus group guides directed inquiry toward current practices, perceived challenges, and openness to constructive alternatives. All data were collected in person by the researcher over eleven weeks (January to March 2024).

3.4 Data Analysis

Quantitative data were analyzed in SPSS Version 26. Descriptive statistics (frequencies and means) summarized patterns across the sample. Inferential analysis used independent samples *t*-tests, one-way ANOVA, Pearson and partial correlation, and hierarchical multiple regression to examine group differences and variable relationships (Tabachnick & Fidell, 2013; Cohen, 1988). Effect sizes (Cohen's *d*, η^2) were calculated for all inferential tests. All scales showed acceptable internal consistency (Cronbach's $\alpha > .70$). **Qualitative data** were analyzed through thematic analysis (Braun & Clarke, 2006) in NVivo 12. Trustworthiness was established through methodological triangulation, prolonged engagement, and member checking (Lincoln & Guba, 1985).

3.5 Ethical Considerations

Ethical approval was granted by the Faculty of Education Ethics Review Committee, University of Colombo. Informed consent including parental consent for student participants was obtained before data collection. Participation was voluntary throughout, and all data were handled anonymously and confidentially in accordance with institutional research ethics guidelines.

4. Findings

4.1 Disciplinary Practices in Schools

4.1.1 Teacher Reports

Table 1 shows that all seven punitive methods were reported by at least 80% of teacher respondents. Referral to the principal and summoning parents were most common (93.9% each), followed by classroom detention (91.8%), physical punishment (86.7%), classroom exclusion (85.7%), verbal reprimand (82.7%), and kneeling (80.6%). Only 13.3% of teachers reported never using physical punishment a figure that stands in direct contrast to the legal prohibition currently in force.

Table 1 : *Frequency of Punitive Disciplinary Methods Reported by Teachers (n = 98)*

Disciplinary Method	Always %	Sometimes %	Rarely %	Never %	Usage %[a]
Physical punishment	12.2	45.9	28.6	13.3	**86.7**
Verbal reprimand	8.2	42.9	31.6	17.3	**82.7**
Kneeling	6.1	38.8	35.7	19.4	**80.6**
Exclusion from classroom	14.3	41.8	29.6	14.3	**85.7**
Detention in class	18.4	49.0	24.5	8.2	**91.8**
Summoning parents	22.4	53.1	18.4	6.1	**93.9**
Referral to principal	28.6	49.0	16.3	6.1	**93.9**

Note. *[a]Usage % = Always + Sometimes + Rarely.*

4.1.2 Student Observations

Student accounts confirmed that punitive practices are widespread. Most commonly witnessed behaviors included summoning parents to school (86.2%), classroom exclusion (80.0%), being made to stand in direct sunlight (72.8%), physical striking (65.1%), and public humiliation (60.5%). Chi-square analyses confirmed that student-observed rates differed significantly from teacher self-reports across all comparable measures (all $\chi^2 > 14.2$, $p < .01$).

4.1.3 Discrepancies Between Teacher and Student Reports

Student-reported rates were consistently higher than teacher self-reports. The largest differences were for kneeling (teachers: 44.9%; students: 70.8%; gap: 25.9 percentage points) and classroom exclusion (teachers: 56.1%; students: 80.0%; gap: 23.9 percentage points). These findings suggest that teachers underreport punitive practices, most likely due to social desirability effects, and indicate the value of collecting disciplinary data from multiple sources.

4.2 Attitudes Toward Punitive Discipline

4.2.1 Teacher Attitudes

The overall teacher attitude scale mean ($M = 3.41$, $SD = 0.76$) fell slightly above the midpoint, indicating moderate openness to constructive alternatives. Teachers most strongly endorsed the need for further professional training ($M = 4.28$) and the greater effectiveness of positive reinforcement over punishment ($M = 4.12$). Public humiliation

(M = 2.34) and the use of intimidation as a management tool (M = 2.56) received the least support.

Female teachers (M = 3.58, SD = 0.71) held more favorable views toward supportive approaches than male colleagues (M = 3.08, SD = 0.79), $t(96) = 3.24$, $p = .002$, Cohen's $d = 0.68$, a medium-to-large effect. School type was also a significant factor, $F(2, 95) = 3.98$, $p = .022$, $\eta^2 = .077$, with Tukey post-hoc tests confirming that Type 1AB teachers were more open to change than those at Type 2 schools ($p = .019$). Less experienced teachers showed stronger readiness to adopt alternative approaches than senior colleagues, $F(3, 94) = 4.16$, $p = .008$, $\eta^2 = .117$.

4.2.2 Student Attitudes

Students held clearly negative views of punitive discipline (M = 3.63, SD = 0.72). They strongly agreed that public punishment causes shame (M = 4.32), that guidance is preferable to punishment (M = 4.26), and that teacher explanation is more helpful than reprimand (M = 4.18). Students also reported that punishment reduces their respect for teachers (M = 3.82) and increases classroom anxiety (M = 3.74). Female students were significantly more critical of punitive approaches than male students, $t(193) = 2.67$, $p = .008$, Cohen's $d = 0.39$, a small-to-medium effect.

4.2.3 Knowledge, Attitudes, and Practice

Pearson correlations revealed positive associations between teacher knowledge and attitudes ($r = .642$, $p < .001$) and between attitudes and constructive practice ($r = .728$, $p < .001$). When attitudes were statistically controlled, the knowledge–practice correlation declined from $r = .682$ to $r = .312$, indicating that attitudes mediate much of knowledge's influence on behavior.

Hierarchical regression confirmed teacher attitudes as the strongest predictor of constructive practice ($\beta = .556$, $p < .001$), followed by knowledge ($\beta = .300$, $p < .001$). Demographic variables accounted for 8.4% of the variance ($R^2 = .084$, $F(3, 94) = 2.89$, $p = .039$); adding knowledge increased this by 9.0% ($\Delta R^2 = .090$, $p < .001$); and the addition of attitudes produced the largest increment ($\Delta R^2 = .309$, $p < .001$), bringing the full model to $R^2 = .642$, $F(6, 91) = 27.84$, $p < .001$.

4.3 Constructive Approaches to Behavioral Change

4.3.1 Student Preferences

Students consistently favored supportive, communication-based teacher responses. Table 2 shows that explaining a student's mistake was most preferred (94.9%), followed by praising positive behavior (91.8%), providing an opportunity to clarify (90.0%), teaching how to correct errors (89.7%), and resolving issues through dialogue (86.7%). Physical punishment and verbal reprimand attracted the lowest preference ratings (23.1% each), with most students actively disliking these approaches.

Table 2

Student Preferences for Teacher Disciplinary Responses (n = 195)

Teacher Response	Preferred % (Like / Strongly Like)	M	SD
Explaining the student's mistake	94.9	3.57	0.62
Praising positive behavior	91.8	3.47	0.70
Giving opportunity to clarify	90.0	3.34	0.72
Teaching how to correct mistakes	89.7	3.39	0.76
Resolving problems through dialogue	86.7	3.29	0.80
Teaching alternative behaviors	83.6	3.18	0.82
Physical punishment (traditional)	23.1	1.86	0.94
Verbal reprimand	23.1	1.85	0.98

Note. *M = mean preference on a 4-point scale (1 = Strongly Dislike, 4 = Strongly Like). Responses ranked by preference level.*

4.3.2 The Role of Punishment Experience

A one-way ANOVA showed that students with greater personal experience of punishment expressed stronger preferences for restorative alternatives, $F(2, 192) = 7.84$, $p < .001$, $\eta^2 = .076$. Tukey post-hoc comparisons confirmed that students punished most frequently ($M = 3.52$) preferred non-punitive approaches significantly more than those with minimal exposure ($M = 3.08$, $p = .003$). Direct exposure to punitive practice appeared to strengthen, rather than normalize, students' preference for change.

4.3.3 Student Voices

Two themes emerged from focus group discussions. The first was the need for dialogue and the chance to be heard. A Grade 10 student explained: "Teachers scold us and give us punishments, but they never give us space to speak. Even when we make a mistake, there is a reason behind it. If they gave us the chance, we could explain." The second concerned recognition and encouragement. A Grade 9 student noted: "When we do something good, teachers never say anything. But when we make a mistake, they scold us. We need to hear positive things. Our good actions need to be recognized." Both themes reflect the democratic teaching principles of Dreikurs (1968) and the behavioral

reinforcement framework of Skinner (1938), and echo findings from comparable South Asian research (Rahman, 2021).

5. Discussion

5.1 The Gap Between Law and Classroom Practice

Continued widespread use of physical punishment despite clear legal prohibition reflects a cultural norm that legislation alone cannot displace. This study extends the NCPA (2019) findings by quantifying the gap between teacher self-reports and student observations, reaching 25.9 percentage points on specific items. This pattern is consistent with social desirability effects documented in comparable research (Gershoff & Grogan-Kaylor, 2016). Collecting disciplinary data from both teachers and students is therefore important for an accurate assessment of actual classroom practice.

5.2 Attitudes as the Key Driver of Change

Teacher attitudes emerged as the most influential predictor of whether supportive disciplinary approaches are actually used. Training programs should address teacher beliefs and values alongside practical techniques, since educators who know about restorative methods but have not accepted their value are unlikely to apply them consistently under everyday classroom pressures. This aligns with Glasser's (1998) position that internal values, not skills alone, drive lasting behavioral change.

5.3 Taking Student Perspectives Seriously

Students consistently rejected punitive approaches and preferred respectful, dialogue-based alternatives. Their stronger preference for change among those with greater punishment experience — confirmed by one-way ANOVA, $F(2, 192) = 7.84$, $p < .001$ — suggests that students are not passive recipients of disciplinary practice but informed stakeholders whose perspectives carry evidential weight. This reflects Bandura's (1977) observation that those most directly exposed to a behavior's consequences develop the clearest understanding of its effects.

5.4 Implications for Practice and Policy

At the practice level, professional development must target teachers' values and beliefs, not only their techniques. At the policy level, the 2025 Penal Code Amendment creates a legal foundation that now requires practical support: school-level discipline frameworks, attitude-focused training, and accountability mechanisms. Because the sample was drawn from a single educational zone, findings should be interpreted within that scope; broader replication across diverse regions is encouraged.

5.5 Theoretical Contributions

The findings supported all five theoretical perspectives applied in this study. Attitude and practice data affirmed Skinner's (1938) argument that positive reinforcement builds intrinsic motivation more effectively than punishment. The teacher–student reporting gap illustrated Bandura's (1977) insight about behavioral modeling. Student voices echoed Dreikurs' (1968) emphasis on dialogue and mutual respect. The dominance of attitudes in the regression model ($\Delta R^2 = .309$) supported Glasser's (1998) position that internal values drive lasting change. Student preferences for resolution-centered responses resonated with Zehr's (2015) restorative justice principles.

6. Conclusions and Recommendations

This study found that punitive discipline remains deeply embedded in Sri Lankan schools despite legal prohibition, and that teacher self-reports substantially undercount its actual prevalence. Both teachers and students hold largely negative views of punitive approaches, though more experienced teachers show greater resistance to change. Students are consistent advocates for respectful, supportive discipline, and those with the most experience of punishment are the most motivated for reform. Teacher attitudes emerged as the most influential determinant of whether constructive disciplinary methods are practiced in the classroom.

For teachers: regular self-reflection and deliberate development of skills in constructive communication and behavioral reinforcement are encouraged. For school leaders: professional development should address beliefs and values alongside practical techniques. For policy makers: a national framework for constructive school discipline aligned with the 2025 Penal Code Amendment and the UN Convention on the Rights of the Child (United Nations, 1989) should be developed, with a dedicated Ministry of Education unit to coordinate training, implementation, and monitoring. Future research should track the long-term outcomes of school-level disciplinary reform and develop restorative models adapted to Sri Lankan cultural and institutional contexts.

The central lesson of this study is clear: reforming school discipline in Sri Lanka requires changing how teachers think, not only what they know. Policy, professional development, and school leadership should all be guided by this finding.

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Chapter 9: Cyberfeminism and Online Gender-Based Violence in India: A Contextual and Critical Analysis

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Abstract
The study aims at comprehending the relationship between the cyberfeminism and online gender-based violence (OGBV) in the Indian context. It aims to build a theoretical and contextual approach to tackle the injustices of digital gender. The study examines OGBV issues in India on social media and the impact of the types of OGBV on social media by covering cyberfeminist theory. It analyses and evaluates India's position with other G20 countries and how the COVID-19 pandemic exacerbated online violence. The gaps in response to digital violence are also assessed and policy and legal frameworks are also reviewed. The methodology of this research is qualitative analysis by literature study, policy study, secondary data analysis with comparative analysis. The issue of power dynamics, intersectionality and online power are explored using Cyberfeminist strategies. Comparative and contextual analyses of urban-rural and global data also feature in the study. It concludes that OGBV is pervasive and multifaceted in India. Women and gender diverse people are harassed, cyberbullied and their images distributed without their consent, causing trauma, self-censorship and hindering online participation. There is legislation in place, though reporting and enforcement is challenging, and has worsened during the pandemic. There is a social implication of this study. It emphasises the importance of a multi-faceted approach to raising digital literacy, policy and community awareness. The need for cyberfeminism is emphasized to facilitate the creation of safe and equal/collaborative online environment. The paper's originality can be attributed to its synthesis of cyberfeminist theory, contextual analysis of digital spaces of India, and comparison with G20. It is a continuation and further development of existing digital gender justice projects, and also features a multi-dimensional concept of digital cyberfeminism which addresses policy change, digital literacy and grassroots community work. This research highlights two important aspects of interaction that are often overlooked when considering social environment for safe and equitable online communities: collective and collaborative.

Keywords: Cyberfeminism, Online Gender-Based Violence (OGBV), Digital Gender Justice, Social Media Harassment, India

1 . Introduction

The digital age has enabled increased connections and expression across the world, and created new forms of gender-based violence online (Dwivedi et al.; STRASBOURG, 2022). Online gender-based harassment, cyber bullying, doxing, revenge porn, and sexist hate speech are all forms of social media gender-based violence (GBV) (Dunn, 2020). This type of conduct inflicts emotional, psychological and physical damage, instills fear and oppresses minorities. This is detrimental to gender equality and freedom of expression. The problem in India has become more complicated in an era of increased internet connectivity, with greater challenges and opportunities for women and gender diverse people (USAID, 2022).

The solution to this problem is not a digital or legal one but a multi-faceted solution that places a focus on gender, identity, culture and technology. In this article, we have done an introduction to the cyberfeminist approach in addressing GBV on social media in India which helps people and communities take preventive actions against GBV online and establish a more just, safe, and equal digital space. The subsequent sections provide an overview of the literature related to cyberfeminism and online GBV, outlines our framework, specifically examines Indian social media for GBV, and offers some recommendations for activists, policy makers, and individuals to build a safer, more inclusive online space in India. Internationally, the term cyberfeminism or OGBV is very common and yet in the Indian context awareness and interest in the study of this area is still lacking. In all, this study can give a context and critical description of the situation of cyberfeminism and OGBV in India and in the international world.

2. Literature Review

Cyberfeminism began as a desire to find out through the use of this perspective how gender, technology, and power relate to each other in the digital environment. Since the late 1990s, cyberfeminist writings had highlighted both the positive impacts of digital technologies as tools of empowerment and the negative aspects as ways to maintain patriarchal structures, exclusiveness, surveillance and violence. Nowadays research is showing that digital environments are like two-edged swords: on one hand, they offer a great deal of opportunity to engage, to be active and to construct one's own identity, yet, on the other hand, there are also incidents of harassment, discrimination and use of technology for domination.

Cyberfeminism, Digital Empowerment, and Feminist Agency

A key point in the cyberfeminist literature is that of women and other gender minorities who use digital technologies in a emancipatory way. Early studies were on the potential of online spaces and institutional places to challenge the power structure and to invite the participation of feminists. Cunningham and Crandall (2014) presented examples of how non-profit organizations used social media to promote feminist involvement and social justice campaigns, and Schlesselman-Tarango (2014) combined feminist pedagogy and critical information literacy to help empower students in the context of digital participation and inclusive information practices. Technology is considered here

as a transformative medium, which can serve to make knowledge more accessible and offer alternative feminist discourses.

Subsequent studies focused on using cyberspace to empower women and feminist activism. Mohaty and Samantaray (2017) claimed that women are given the chance to express themselves, participate and resist to the male dominated technological frameworks in digital environments. Similarly, Verma et al. (2018) have talked about how important social media campaigns such as Facebook, Twitter and Instagram are in developing feminist awareness and advocacy internationally. In the era of fourth-wave feminism, Tazi and Oumlil (2020) showed how ICTs were used as tools in the process of mobilising feminists in the Arab Spring in Egypt, Tunisia and Lebanon where online activism was increasingly intertwined with social justice and gender equality movements.

The studies here collected all signify that cyberfeminism can be understood as a process which recognizes digital technologies as spaces of empowerment, activist, networking and collective resistance. The Internet has given rise to the possibility of marginalised voices to be heard, public discourses questioned, and alternative publics to come into existence.

Digital Culture, Identity, and Representation

Another significant research area in cyberfeminism is digital culture, identity building and media representation. Koo (2019) illustrated the role of identity politics and trolling online in the building of feminist counterpublics using the example of the South Korean cyberfeminist movement Womad. Furthermore, Lestari et al. (2020) did a study on the #YourBeautyRules campaign in Indonesia which resulted in the online campaign as a tool in women empowerment for women to express themselves, grow confidence and empowering women in online communities.

There have been other studies that have focused on the impact of cyberfeminism in the entertainment media, video games, virtual space. Gurunathan (2022) analysed the genders represented and the normativisation of gender policing in the online gaming community of The Witcher 3: Wild Hunt, and pointed out how gender stereotypes are still alive online and how there are opportunities to challenge and question gender norms. Likewise, also Toto and Scarinci (2022) described cyberfeminism as a contemporary feminist movement having digital media platforms such as webinars, YouTube channels and online publications that has impacted the communication and public participation of feminist movements.

To sum up, the research in this section identifies digital environments as an area that not only do not remain neutral, but actually contribute to the creation of identities, social relations, and cultural representations. One of the foci of the Cyberfeminist scholarship is therefore to critically discuss the challenges and the reproduction of social inequalities that happens when interacting online.

Tensions Between Digital Empowerment and Digital Violence

Despite the emancipatory possibilities associated with cyberfeminism, scholars increasingly acknowledge the tensions between digital empowerment and digital surveillance, harassment, and violence. While digital platforms offer opportunities for visibility and participation, they also expose women and marginalized groups to new forms of vulnerability and technological control.

Kiani et al. (2023) explored the experiences of Iranian women in the vTime cyberworld and concluded that digital spaces could be seen as safe havens where women can enjoy greater freedom and mobility. But the reality remains that women are constantly subjected to harassment, surveillance, stigma, patriarchal anxieties, and are legally restricted in these spaces. These authors use the example of Iranian women's experiences to demonstrate the contradictory nature of digital worlds. Empowerment through digitization is often accompanied by increased scrutiny and gendered vulnerabilities.

On the other hand, Panda (2023), from a cyberfeminist perspective, studies violence against women on the internet and features the aspects of embodiment, intersectionality, resistance, and survivor experiences in social media environments. The research points out that online violence not only stays on the digital platforms but also causes severe psychological and social consequences offline. It also outlines the necessity of policy measures, community-based initiatives, and continual advocacy to combat the increasing incidence of digital gender violence.

It is obvious from these investigations that the idea of cyberfeminism not only offers a language of freedom but also a digital environment that is more open. However, digital inequalities in the Digital Environment lead to a broader socio-political and patriarchal space that supports inequalities including cyberbullying, trolling, doxxing, image misuse, surveillance, or a misogynistic online culture.

While cyberfeminism offers a valuable lens for comprehending gender and technology, some scholars have noted that it can be used in certain ways that are limiting. Critics also note that empowerment does not necessarily come with the digital access, as the inequalities associated with class, caste, race, geography, and someone's digital literacy remain a reality in online participation, especially in developing societies. Moreover, there are some instances in which cyberfeminist perspectives are accused of being too optimistic about technology, as they fail to consider the social aspects of the media, algorithms and surveillance, which creates and sustains the power structure of patriarchy and capitalism. The international nature of cyberfeminist discourse could also overlook cultural and geographical nuances of experiences with online violence. Moreover, women's online experiences are influenced by multiple factors like caste, ethnicity, sexuality, disability and socio-economic status, which further requires more intersectional and contextually sensitive approaches. Existing studies have largely focused either on digital empowerment or isolated forms of online harassment, with limited research comprehensively examining online gender-based violence in India through integrated analyses of cyberfeminism, legal frameworks, pandemic-related transformations, and social media dynamics. Therefore, the present study addresses

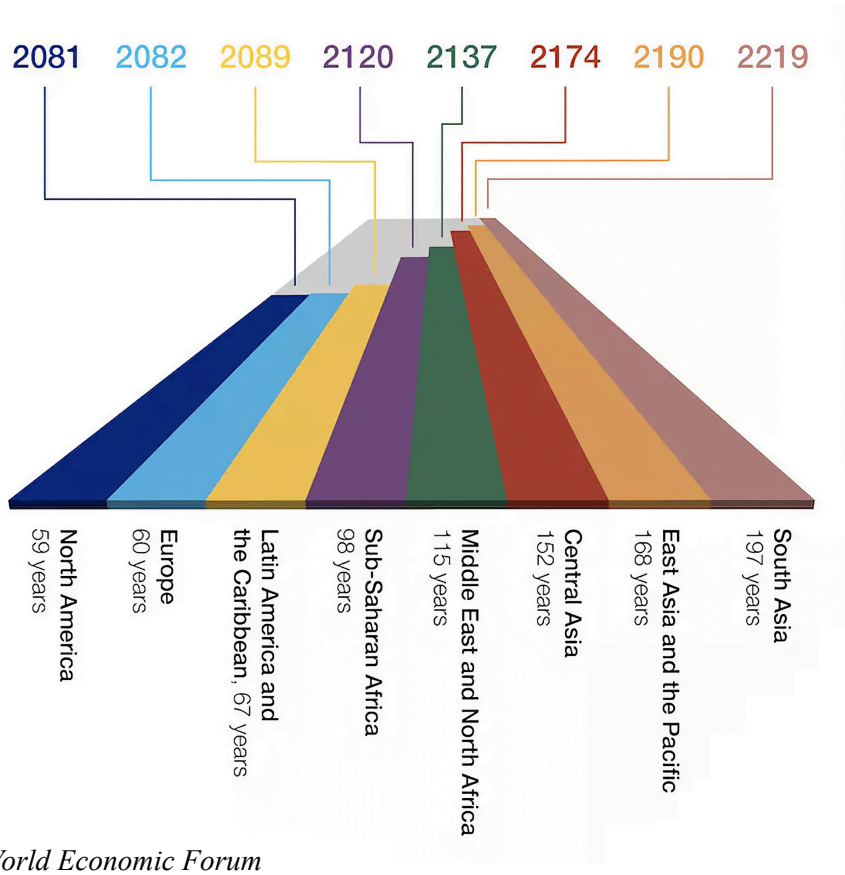
this gap by developing a multidimensional and contextual analysis of online gender-based violence in India through a cyberfeminist perspective.

3. Need of the Study

The progress of gender parity in North America and South Asia varies greatly, according to the Global Gender Gap Report 2022 published by the World Economic Forum. It is estimated that the North American regions are likely to reach gender parity the fastest, with a projected timeframe of 59 years (Figure 1). In contrast, it will take 197 years for India and other South Asian countries to achieve gender parity. Such contrasting evidence suggests the need to tackle the barriers that limit the status of women and lead to abuse on a daily basis. It is important for organisations and individuals to engage in projects that advance gender equality and women's rights.

In the digital era, it is imperative to understand women's experiences in digital spaces. This research becomes imperative as it is designed to tackle the issues of gender-based violence in cyber spaces in India. The aim is to highlight women's struggles, as per the demands of modern society.

Figure 1. Projected Regional Timelines for Closing the Gender Gap



Source: World Economic Forum

4. Objectives

The purpose of this research is,

1) To examine the theoretical foundations of cyberfeminism and explore its role in addressing and combating online gender-based violence (GBV).
2) To understand the nature and effects of GBV on social media in India, including legal and policy implications.
3) To compare GBV in India with the rest of the G20.
4) To understand the impact of the coronavirus pandemic on Online GBV.
5) To examine and mitigate issues, such as potential drawbacks, ethical issues and backlash, in the fight against Online GBV.
6) To recommend policy, community and education initiatives to prevent Online GBV.

5. Overview of Cyberfeminist Theory

Cyberfeminism is a theoretical perspective that emerged in the late 20th century in response to the rapid advancement of digital technologies and their impact on society. It is a multifaceted and evolving perspective that seeks to analyse, assess, and transform the relationship between gender, technology, and power in the digital age. At its core, cyberfeminism highlights the experiences and concerns of women and gender-diverse individuals in the digital world, recognising that it is not an apolitical space but one profoundly shaped by social, cultural, and political factors.

Cyberfeminism encompasses the following ideas:

1 Intersectionality: Cyberfeminism takes an intersectional approach, recognising that people experience the digital space in various ways by virtue of their multiple identities (including, but not limited to, gender, race, class, sexuality, and ability). This view understands the experiences of online gender-based violence in this context.

2 Hacking the System: Cyberfeminism promotes the hacking of technology for feminist ends. This includes leveraging technologies and platforms to disrupt existing power dynamics, give voice to marginalised perspectives and create new spaces for activism.

3 Cyberbodies: Cyberfeminism focuses on "cyberbodies" - the embodiment of individuals online. This examines the representation, manipulation, and potential liberation of gendered identities online, as well as the relationship between online and offline identities.

4 Online Activism: Cyberfeminists often participate in online activism, leveraging the internet for feminist community-building, awareness-raising, and activism. They understand the internet's capacity to organise and bring about change.
5 Challenge of Technopatriarchy: Cyberfeminism challenges technopatriarchy, the dominance of male viewpoints, values, and power hierarchies in the design and use of technology and the internet. It aims to expose and overturn these patriarchal practices.

Cyberfeminism provides a lens to understand the power structures, how technology can enable or hinder gender equity and strategies for building a safer and more inclusive online space when it comes to tackling gender-based violence on Indian social media. It provides us with a way to understand the unique issues faced by women and other gender minorities in India, and to develop complex solutions that support equity and social justice while being sensitive to cultural differences.

6. Contextual Analysis of GBV in Indian Social Media

6.1 Forms of GBV on Social Media

In India, GBV on social media is multifaceted in nature, revealing the use of media for violence. Recognising these types of violence is essential for prevention and redress (Dwivedi, et al., 2021; Sanusi, 2021; Women's Media Center (WMC), n.d.):

1. Cyber Harassment: This includes one-on-one forms of gendered verbal abuse, threats and harassment. Offenders engage in online surveillance, intimidation or silencing of targeted individuals.
2. Cyberbullying: This is similar to cyber harassment but tends to be more persistent, often public forms of aggression, such as spreading rumours, posting embarrassing photos or videos, or group shaming, involving individuals or groups.
3. Revenge Porn: There is widespread non-consensual sharing of nude images or videos. Perpetrators may use nude photos to blackmail, embarrass or emotionally harm their victims.
4. Cyberstalking and Doxxing: Cyberstalking is a form of harassing through monitoring and pursuit; doxxing is a form of exposing another person's personally identifying information. Both can lead to real-world threats and violence.
5. Sexist Hate Speech: This is content that explicitly targets women or gender minorities to perpetuate stereotypes, discrimination or incite gender-based violence.

6.2 Impact on Victims and Society

Social media gender-based violence in India is not just online; it affects individuals and society (STRASBOURG, 2022). Online abuse results in anxiety, depression and post-traumatic stress disorder (PTSD) and causes mental health issues. Cyber gender-based violence results in victim silencing as many are afraid to express opinions and ideas online and avoid sharing to avoid abuse. This stifles free speech and participation. Sexist hate speech and violence reinforce gender stereotypes and promote inequality and discrimination in the offline world. Therefore, online gender-based violence inhibits women and marginalised groups from participating in society, restricting access to knowledge, opportunities and economic empowerment.

6.3 Legal and Policy Landscape in India

India has come a long way in the acknowledgement and prevention of online gender violence. But there are still several issues, as illustrated by recent policy and legislation:

1. Information Technology Act 2000 (Amendment 2008): The 2008 amendment contained provisions on cyber bullying and harassment, but is hard to prosecute.
2. Similarly, the Criminal Law (Amendment) Act, 2013, contained measures to prohibit the circulation of non-consensual nude photos. But there are problems with under-reporting and delays for the victims (Ministry of Law and Justice, Government of India, 2013).
3. In response, in 2021, the Indian government put forward Social Media Guidelines for Intermediaries, which mandate measures to curb violence on social media and curb the spread of fake news (Ministry of Electronics and Information Technology, Government of India, 2021). But the guidelines have raised concerns about censorship and privacy.

But as activists call for more specific laws to address online gender violence, to make it easier to report and take action against perpetrators (Nahvi, 2023). To address these problems, a multi-faceted approach is required in Indian social media, including policy advocacy, media literacy programs, legal reforms and community and individual empowerment.

7. Status of GBV in India among G20 Countries

India is one of the 19 countries that make up the Group of Twenty (G20), a bloc that also includes the European Union and major economies such as the United States, China, Germany, and Japan. Approximately two-thirds of the world's population, more than 75% of global trade, and 85% of global GDP are accounted for by the G20 member nations (National Portal of India, n.d.). The G20 can provide a comprehensive picture of women's social position globally, as it is impractical to research each nation and continent separately.

Table 1: Gender-Based Violence (GBV) and Accessible Preventive Measures in G20 Countries

Country	Violence*		Measures*	
	Forms	**Numbers**	**Types**	**Numbers**
Brazil	4	12	3	11
Saudi Arabia	4	19	6	24
Russia	5	25	6	23
China	5	35	9	34
Republic of Korea	5	56	9	53
Japan	6	77	8	59
Argentina	6	104	10	131
Indonesia	6	31	6	33
Mexico	6	112	10	82
United States	7	58	7	45
Italy	7	40	8	28
India	8	148	9	124
South Africa	8	30	6	24
Germany	9	108	9	102
United Kingdom	9	156	9	105
France	9	195	10	132
Canada	9	208	9	220
Australia	9	247	10	208
Turkiye	9	54	7	44

**Source: (UN Women, Global Database on Violence against Women)*

Table 1 shows data on violence against women and existing measures to prevent violence for each G20 country. It indicate that Australia and Turkiye are the two countries with the highest cases of violence against women.

Table 2: Gender Inequality and Gap Index in G20 Countries

Country	Gender Inequality Index Rank*	Global Gender Gap Index Rank**
Italy	13	63
Republic of Korea	15	99
Canada	17	25
Australia	19	43
Germany	19	10
France	22	15
Japan	22	116
United Kingdom	27	22
United States	44	27
China	48	102
Russia	50	Data not available
Saudi Arabia	59	127
Turkiye	65	124
Argentina	69	33
Mexico	75	31
Brazil	94	94
South Africa	97	20
Indonesia	110	92
India	122	135

**Source: (United Nations, "Uncertain Times, Unsettled Lives: Shaping Our Future in a Transforming World")*
***Source: World Economic Forum*

According to the research, India and Indonesia have the lowest levels of gender equality, while Canada and Germany have the greatest (Table 2). When viewed more broadly, it is clear that the South Asian region is far behind in achieving gender equality.

8. COVID-19 and its Impact on Online GBV

Violence against women (VAW) is a prevalent human rights abuse affecting people, families and communities around the world. This problem has been exacerbated by the COVID-19 pandemic, which has led to a significant increase in gender-based violence due to the social and economic pressures, restrictions on movement, and social distancing requirements (United Nations, 2020). Two common forms of VAW during the pandemic are domestic abuse and online violence (UN Women, 2020). Such violence takes place in a context of discrimination against women.

Research reveals that online and technology-facilitated violence disproportionately targets women, causing catastrophic consequences. Despite the lack of a comprehensive global definition and data, women and girls face higher rates of online violence, which includes multiple forms of gender-based abuse (OHCHR, 2018).

Certain marginalised groups of women are especially vulnerable to technology-facilitated violence. These include human rights defenders, women in politics, journalists, bloggers, ethnic minorities, indigenous women, lesbian, bisexual, and transgender women, as well as women with disabilities (OHCHR, 2018). In particular, young women ages 18 to 29 in Europe are at the highest risk. Similarly, in the United States, one in two young women in this group reports receiving unsolicited explicit photographs, while two out of ten report experiencing online sexual harassment (UN Women, 2020).

Despite the ongoing gender digital divide, women and girls have been using the internet more during the COVID-19 epidemic (Foleon.com). This global health crisis has been characterised as the first major pandemic in the era of social media, with over half of the world's population subjected to lockdown measures by early April 2020 (Molla, 2020). As quarantine and self-isolation policies have been implemented, internet usage has surged by 50% to 70% (Beech, 2020), as individuals, including women and men, rely on the internet for work, education, and social interactions. However, during this time, people with poor computer abilities are especially susceptible to cyberviolence. It is alarming to note that the digital gender divide exacerbates the risk for women and girls, heightening their susceptibility to various forms of online violence (OECD, 2018).

This is the reason, besides physical violence, that online violence against women and girls has emerged as a shadow pandemic. Physical threats, sexual harassment, stalking, zoombombing, and sex trolling are common forms of online violence against women and girls. Media reports and women's rights organisations have documented cases of unsolicited pornographic videos displayed during online social events, threats of violence, sexist content, and racially charged and sexually explicit material "zoombombing" video calls, catching participants off guard (Glaser et al., 2020; Loots et al., 2020; Mudgway & Jones, 2020).

Data from the eSafety Commissioner in Australia shows a 50% increase in online abuse and bullying in the early months of the pandemic (Australia News, 2020). Europol reports a rise in online activity related to child abuse material in Europe, while the Commission on Human Rights in the Philippines has observed a surge in peer-to-peer online violence against women and girls during the quarantine period (Europol, 2020). Additionally, pornographic traffic has dramatically increased, heightening the risk of sextortion globally (UNODC, 2020).

To combat this growing phenomenon, it is critical to focus on the development of legal, social and policy responses. It is only through the joint efforts of governments, civil society, and digital stakeholders that the ever-increasing threat of online gender-based

violence against women and girls will be tackled and their rights secured in the digital era.

8.1 Indian Context

There has been a steady rise in online violence in India, including higher rates of violence among women than men. A recent study by Quilt and the International Centre for Research on Women (ICRW) mapped the prevalence of online violence and other behaviours in India before and during the pandemic (ICRW and Quilt.AI, 2021).

Four urban locations (Bengaluru, Delhi, Mumbai and Kolkata) and four rural locations (Assagao, Kangra, Palakkad and Gaya) were examined. The researchers identified trends through social media and search engine data. The study informed recommendations for technology platforms, governments and non-government organisations (NGOs) to help prepare for future crises.

Table 3. Search Volume and Growth: Selected Urban Cities in India

Category	New Delhi, Delhi		Bengaluru, Karnataka		Mumbai, Maharashtra		Kolkata, West Bengal	
	Search Volume during COVID	Growth in Interest *	Search Volume during COVID	Growth in Interest *	Search Volume during COVID	Growth in Interest *	Search Volume during COVID	Growth in Interest*
Doxxing	8%	214%	10%	191%	9%	211%	6%	169%
Exploitation	36%	48%	34%	37%	34%	33%	37%	49%
Gendertrolling	3%	54%	4%	62%	3%	67%	3%	65%
Hacking	34%	66%	38%	70%	38%	61%	34%	65%
Image based abuse	0%	120%	0%	55%	0%	96%	1%	58%
Sexual harassment	1%	13%	1%	9%	1%	-8%	1%	28%
Stalking	7%	23%	6%	20%	9%	43%	9%	53%
Threatening	1%	57%	1%	39%	1%	3%	1%	57%
Using fake accounts	9%	33%	6%	15%	6%	41%	8%	-2%

**pre vs during COVID*
Source: ICRW and Quilt.AI

A few interesting observations can be made from the search results of Bengaluru, Delhi, Kolkata and Mumbai (Table 3). All cities saw the most searches for exploitation-related keywords. Terms relating to hacking came next. A recent trend among cybercriminals is that of doxxing (to publicly release private information). The growth rates were 214% in Delhi and 211% in Mumbai. Bengaluru and Kolkata were also interested with a 191% and 169% growth respectively. There was also an increased interest in gender trolling and revenge porn. Hacking continued to be a problem, as searches continue to be high and growing in all cities. This suggests hacking has been an issue for some time. Interestingly, both pre- and post-COVID-19, Delhi had the highest increase in searches for doxxing (214%) and image-based abuse (120%) among the cities.

Table 4. Search Volume and Growth: Selected Rural Cities in India

Category	Palakkad, Kerala		Assagao, Goa		Kangra, Himachal Pradesh		Gaya, Bihar	
	Search Volume during COVID	Growth in Interest *	Search Volume during COVID	Growth in Interest *	Search Volume during COVID	Growth in Interest *	Search Volume during COVID	Growth in Interest *
Doxxing	6%	150%	22%	600%	8%	132%	11%	267%
Exploitation	23%	117%	34%	-21%	22%	51%	28%	78%
Gendertrolling	8%	58%	6%	20%	6%	83%	6%	256%
Hacking	47%	147%	19%	-14%	42%	107%	29%	89%
Image based abuse	1%	67%	0%	0%	0%	0%	0%	0%
Sexual harassment	1%	22%	3%	0%	2%	50%	3%	30%
Stalking	10%	58%	9%	-25%	14%	95%	15%	95%
Threatening	1%	13%	3%	10%	1%	-27%	3%	0%
Using fake accounts	4%	147%	3%	10%	5%	93%	5%	115%

**pre vs during COVID*
Source: ICRW and Quilt.AI

Data from Assagao, Kangra, Palakkad, and Gaya were analysed in the research of rural regions (Table 4). While Doxxing was seen to be increasing in several cities, the search volumes of terms in the Hacking and Exploitation category were generally well-established. Help-seeking searches in Kangra increased by 174% during the COVID-19 period. Gaya had a growth rate of 71%, whereas Palakkad had a growth rate of 129%. These results show how rural residents' search habits and concerns are

changing, illuminating the particular difficulties they face with online safety and emergency assistance.

9. Applying Cyberfeminism to Address Online GBV

Using cyberfeminism to tackle online gender-based violence in the Indian context is a promising strategy to understand the complexities of this problem and inform intervention and prevention strategies (Faith). In this article, several strategies are discussed and principles of cyberfeminism that can help build a holistic approach to address online gender-based violence in India:

Intersectional Analysis: It is important to understand that the impact of online gender-based violence varies according to individuals' intersecting identities. An intersectional approach takes into account not just gender, but also caste, class, religion and region, which can intensify or dilute the effects of online violence (Roy). Government, advocates and academics need to consider these intersections when developing interventions and support mechanisms.

Digital Literacy and Empowerment: These are key focuses of cyberfeminism. Encouraging digital literacy initiatives that educate people, particularly women and marginalised communities, to safely navigate the digital environment, identify and respond to online violence and use technology as a platform for activism is crucial.

Online Support Networks: Building online support networks and communities can help to end gender-based violence. These can provide support, information and mobilise action. Cyberfeminists have used the internet to create safe online platforms for storytelling, campaigning and advocating for change.

Advocacy: Cyberfeminism includes working with policymakers and platforms to create safe and inclusive policies and platforms. Campaigns for robust policies and reporting mechanisms to address online harassment, and responsibility of social media companies is essential.

Looking past policy and media literacy, and creating counter narratives is also key. Cyberfeminists may participate in media literacy initiatives to challenge and challenge online stereotypes. Media literacy education that allows people to recognise and analyse the gender stereotypes in media can help combat online violence.

Legal advocacy is another cyberfeminist strategy. Collaborating with lawyers and human rights organisations to increase legal protections against online violence, harassment and gendered issues is another cyberfeminist strategy.

Art and Creativity: Art and creativity as modes of resistance and healing is another important strategy of cyberArt, such as digital art, storytelling and performance, which can be used to raise awareness of online violence, share experiences and build community.

Allyship and Solidarity: Cyberfeminism encourages online allyship and solidarity. Allyship may include sharing the stories of victims of online violence, challenging abusive practices and improving online safety.

The methods outlined above will be made even more effective by a rigorous research and data gathering program. Collecting data and studying online gender-based violence will equip cyberfeminists with the knowledge of the characteristics of online violence and the ways of dealing with it. This is a potent, comprehensive, coming-from-the-various-perspectives-of-India kind of strategy that also touches upon the realities and the potentialities of the online environment in India, finally leading to a more equal and safe online space for everyone.

10. Challenges and Critiques

10.1 Limitations of the Cyberfeminist Framework

Although the cyberfeminist framework provides important perspectives and approaches to combat gender-based violence in the digital space, it is crucial to recognise its potential limitations. These include:

Digital Divide: The approach is premised on a level of digital literacy and access. But communities, especially in the developing world, may face digital exclusion and limitations in engaging in digital activism.

Intersectional Challenges: Cyberfeminism calls for an intersectional perspective, but it can be difficult to navigate. Consideration of the varied needs and experiences of different intersectional identities may need to be taken into account.

Global Diversity: Women and gender-diverse experiences are not uniform across the world. A universal approach may not apply to all of these contexts.

10.2 Digital Surveillance, Algorithmic Bias, and Platform Capitalism

As digital platforms become more integral to daily life, there are key issues arising about surveillance and algorithmic control, and platform designs that are geared to profit, which can have a huge impact on online gender dynamics and digital safety.

Online surveillance, online tracking, and violations of privacy rights of women, activists, and marginalized groups are on the rise, potentially reducing digital participation and free expression.

Algorithmic bias: Social media algorithms may promote misogynistic, sensational and harmful content, and automated social media moderation systems can be ineffective at identifying gendered abuse.

Platform Capitalism: Technology companies often focus on profits, engagement and monetising data over keeping users safe, leading to poor or weak responses to online gender-based violence.

10.3 Ethical and Cultural Considerations

The use of a cyberfeminist framework should also consider ethical and cultural factors. These include:

Privacy Issues: Sharing online experiences to empower individuals should not infringe on privacy and consent. Data collection and sharing should adhere to ethical guidelines.

Cultural Sensitivity: Culture plays an important role in online interactions. It's important to consider online gender-based violence from a cultural sensitive, non-ethnocentric, and local lens.

10.4 Opposition and Resistance

The fight against online gender-based violence can encounter resistance and opposition from:

Online Trolls and Abusers: Those engaged in online trolling and abuse may strongly oppose measures to limit their actions, using threats and intimidation to assert dominance in online environments.

Traditionalist Reactions: Efforts to empower women and other marginalised communities in the online space can encounter resistance from traditionalist movements that aim to preserve patriarchal values and traditional hierarchies.

Legal and Policy Resistance: Legal and policy reform to combat online gender-based violence may face opposition from policymakers, tech platforms, and other actors who may have different priorities.

Considering these limitations, critiques, and oppositions is one of the essential stepping stones of developing and execution of a cyberfeminist framework. Confronting difficulties, factoring in ethical and cultural issues, and organizing the counterarguments to opposition and resistance are of paramount importance in the pursuit of gender equality and fighting against online gender-based violence.

11. Recommendations

11.1 Recommendations to Address Online Gender-Based Violence

Laws: Governments should adopt and enforce laws on online gender-based violence. Legislation should define the forms of online abuse, guidelines for reporting, and the consequences for perpetrators.

Online platforms should provide easy methods of reporting gender-based violence. Respond quickly to reports, removing content and suspending perpetrators.

Government, NGOs and schools should develop online safety programs to educate about online security, safe online practices and responses to online gender-based violence.

11.2 Community and Individual Actions

Communities should establish networks to support victims of online gender-based violence. These offer support, information and resources on legal and psychological assistance.

Allyship: Promote allyship online. Encourage people to take action to stop online harassment, support victims, and amplify marginalised voices.

Online Safety: Develop and share online safety tips, such as privacy settings, passwords and personal information.

11.3 Educational Initiatives

Equality Curriculum: Offer cyber-awareness and online safety training. Teach students about online safety, cyber bullying and reporting sexism.

Provide media literacy training to encourage critical analysis and address gender stereotypes in the media.

Provide training to police on how to respond to online gender-based violence. Teach them how to deal with digital evidence and adopt a victim-sensitive approach.

The above recommendations create a safe and equal online environment, allowing everyone to participate without fear of online gender-based violence. Governments, technology companies, civil society and individuals need to take action to combat online gender-based violence and promote an equal and respectful online culture.

12. Conclusion

This article delves into the intersection of cyberfeminism and gender-based violence (GBV) in the online world with specific reference to India. This journey is undertaken to bring to the fore the intricate issues faced by women and people of different gender identities in different digital spaces and to build a theoretical and practical framework to tackle these.

Firstly, the notion of cyberfeminism, a critical approach that has developed over the years to examine the complex dynamics of gender, technology and power in the digital era is examined. This has helped to understand the characteristics of online spaces and their role in enforcing and resisting gender inequalities. The contextual analysis of the social media GBV in India is then examined, which identifies the different forms of online violence, the dire impact on victims and society and the multifaceted policies and laws. This was essential to understand the complexities in this dynamic space. Research was also expanded to understand the state of GBV in India vis-à-vis other G20 countries and the impact of the COVID-19 crisis on online GBV. These analyses showed that to make the digital safer, creative and rapid responses are required. A multifaceted strategy to address online GBV is proposed using the Cyberfeminist approach. Recognising the intersection of identities, protecting privacy and culture, and courageously addressing opposition and criticism are part of this.

This research urges governments, civil society, ICT industry and individuals to work together to combat online GBV. Through constant assessment of emerging threats and strategies, a safe, equal and empowering digital space can be created for all. A persistent effort to eliminate online GBV and foster respect and inclusion is at the root of a more inclusive and safe digital future.

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Chapter 10: Bridging the Cognitive–Behavioral Gap: The Contribution of the Buddhism Curriculum to Soft Skill Development in Sri Lankan Secondary Education

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Abstract

The development of soft skills has become an essential objective of contemporary education as societies increasingly require individuals to possess not only academic knowledge but also interpersonal and behavioral competencies. Despite strong academic performance, concerns have been raised regarding the limited communication, leadership, and problem-solving abilities of many school graduates in Sri Lanka. Within this context, the Buddhism curriculum provides a unique educational framework that emphasizes ethical principles such as compassion, mindfulness, and responsible communication, which may support the development of these competencies. This study investigates the extent to which the Buddhism curriculum contributes to the development of students' soft skills in secondary school education. A mixed-method research approach was adopted, combining quantitative and qualitative data collection techniques. Data were collected from 322 students, 30 teachers, and 7 school principals from selected secondary schools in the Gampaha Educational Zone. Quantitative data were analyzed using descriptive statistics and Pearson correlation analysis, while qualitative data obtained from interviews and classroom observations were examined using thematic analysis. The findings indicate that Buddhist ethical teachings contribute significantly to the development of empathy, emotional awareness, and respectful communication among students. However, leadership and problem-solving competencies demonstrate comparatively moderate levels of development, suggesting a gap between students' conceptual understanding of ethical principles and their behavioral application in real-life situations. This phenomenon is conceptualized in the study as the Cognitive–Behavioral Gap. The study concludes that while the Buddhism curriculum provides a strong ethical foundation for soft skill development, its effectiveness depends largely on pedagogical practices that encourage experiential learning and student participation. Integrating reflective discussion, collaborative learning, and problem-based activities into Buddhist education may help bridge the gap between ethical knowledge and behavioral competence. The findings contribute to the fields of humanities

education and curriculum studies by demonstrating how ethical education can support the holistic development of students in contemporary schooling.

Keywords

Soft skills, Buddhist education, emotional intelligence, moral education, secondary education, Sri Lanka

1. Introduction

Education in the twenty-first century increasingly emphasizes the development of holistic competencies rather than merely the acquisition of academic knowledge. Rapid technological advancement, globalization, and evolving labor market demands require individuals to possess not only subject-specific expertise but also a range of interpersonal and behavioral competencies that enable them to function effectively in complex social and professional environments. These competencies, widely referred to as soft skills, include communication, leadership, collaboration, critical thinking, emotional intelligence, and problem-solving abilities. Contemporary educational discourse therefore recognizes that successful learning outcomes must extend beyond academic achievement to include the cultivation of personal and social competencies that support lifelong learning and adaptability.

International research consistently highlights the importance of these competencies in modern societies. The World Economic Forum (2020) identifies critical thinking, emotional intelligence, leadership, and collaboration as among the most essential skills required in future labor markets. Similarly, economic and educational analyses emphasize that soft skills significantly influence employability and professional effectiveness. Deloitte Access Economics (2017) reports that interpersonal and communication competencies are increasingly associated with productivity, workplace efficiency, and long-term career development. More recent educational studies also emphasize that soft skills play a crucial role in academic success and social integration within learning environments (Brackett, Rivers, & Salovey, 2021).

Despite these global developments, many education systems continue to emphasize academic performance while giving limited attention to behavioral and interpersonal skill development. This situation is particularly visible within the Sri Lankan school education system. Although students frequently achieve high examination results, educators and employers often observe that graduates lack essential competencies required for effective professional and social engagement. Difficulties in communication, limited leadership initiative, and insufficient collaborative skills have been identified as common challenges among young professionals entering the workforce. These concerns indicate that academic success alone does not necessarily translate into practical capability or behavioral competence.

Within this educational context, the Buddhism curriculum occupies a distinctive role in Sri Lankan schools. Buddhism is taught as a compulsory subject in many schools and provides students with extensive exposure to ethical principles, moral narratives, and philosophical reflections. These teachings emphasize compassion, mindfulness, empathy, self-discipline, and social responsibility. Doctrinal concepts such as Samma Vaca (Right Speech), Metta (Loving-kindness), and Dasa Raja Dhamma (Ten Royal Virtues) promote values that are closely aligned with modern understandings of soft skills. For instance, Samma Vaca encourages respectful and responsible communication, Metta cultivates empathy and compassion toward others, and Dasa Raja Dhamma promotes ethical leadership, integrity, and social responsibility. These ethical principles suggest that the Buddhism curriculum may provide a valuable philosophical foundation for the development of communication skills, emotional intelligence, and leadership qualities among students.

The potential connection between Buddhist education and soft skill development can also be understood through several relevant theoretical perspectives. One important framework is Emotional Intelligence Theory, which highlights the role of self-awareness, emotional regulation, empathy, and interpersonal competence in effective human interaction. Goleman (1998) argues that emotional intelligence plays a critical role in leadership, communication, and social relationships. These competencies are particularly relevant to education because they support both academic engagement and personal well-being. Empirical research further confirms the educational value of emotional intelligence. Chen et al. (2025) found that emotional intelligence significantly enhances communication ability and employability-related competencies among university graduates. Similarly, Brackett et al. (2021) emphasize that emotional intelligence contributes to students' social relationships, academic motivation, and psychological resilience.

Another theoretical perspective relevant to this study is Social Learning Theory, proposed by Bandura (1977). According to this theory, individuals learn behaviors through observation, imitation, and interaction with role models. In the context of Buddhist education, narratives from the life of the Buddha and stories found in the Jataka tales function as moral exemplars that illustrate virtues such as compassion, honesty, patience, and responsibility. Through repeated exposure to these narratives, students may internalize ethical principles and behavioral patterns that influence their personal and social conduct.

Moral Development Theory also provides an important conceptual foundation for understanding the potential educational impact of Buddhist teachings. Kohlberg (1984) proposed that individuals progress through different stages of moral reasoning, gradually moving from rule-based behavior toward principled ethical judgment. Ethical teachings embedded within Buddhist education encourage reflection on right conduct,

compassion, and social responsibility, thereby potentially supporting higher levels of moral reasoning and ethical awareness among students.

Recent empirical studies further highlight the relevance of ethical and mindfulness-based education for student development. Research on mindfulness practices suggests that contemplative learning approaches can enhance emotional regulation, attention, and psychological well-being among students. For example, Khanal (2025) found that Buddhist mindfulness practices significantly improve students' emotional regulation and cognitive functioning. Similarly, Liestyowati (2024) demonstrated that emotional intelligence-based learning approaches contribute positively to students' communication and collaboration skills. Educational psychologists also note that social and emotional learning frameworks strengthen students' interpersonal competencies and classroom engagement (Schonert-Reichl, 2023).

Despite the theoretical and empirical support for the relationship between ethical education and soft skill development, a notable gap remains in existing research. While many studies examine emotional intelligence, social learning, or mindfulness in education, relatively few investigations focus specifically on the contribution of the school Buddhism curriculum to the development of students' soft skills in Sri Lanka. Moreover, limited attention has been given to the discrepancy between students' conceptual understanding of Buddhist ethical teachings and their practical behavioral competencies.

This discrepancy represents a significant educational paradox. Students frequently achieve high examination scores in Buddhism, demonstrating strong theoretical knowledge of ethical principles. However, their practical competencies in communication, leadership, collaboration, and problem-solving often remain underdeveloped. This inconsistency between theoretical understanding and behavioral application can be conceptualized as a Cognitive–Behavioral Gap, referring to the disparity between students' knowledge of ethical teachings and their ability to apply these teachings in everyday interactions and decision-making.

Understanding this gap is essential for evaluating the educational effectiveness of the Buddhism curriculum. Although the curriculum contains rich ethical content relevant to soft skill development, the translation of these principles into practical competencies may depend on broader structural and pedagogical factors within the educational environment. Teaching methods, classroom interaction, assessment practices, and institutional priorities may either support or constrain the development of students' interpersonal and behavioral skills.

Therefore, this study investigates the extent to which the Buddhism curriculum contributes to the development of students' soft skills and explores the factors that

influence this process within secondary school education. The central purpose of the research is to examine whether Buddhist ethical teachings function as a meaningful educational resource for cultivating communication ability, leadership capacity, and problem-solving skills among students. By addressing the Cognitive–Behavioral Gap identified in the educational context, this study seeks to provide deeper insight into the relationship between ethical education and soft skill development.

The significance of this research lies in its potential contribution to several areas of educational scholarship and practice. First, it expands existing knowledge in the fields of humanities education, moral education, and curriculum studies by examining how religious education may support the development of practical competencies. Second, it offers a theoretical perspective that integrates Buddhist ethical philosophy with modern educational theories such as emotional intelligence and social learning. Finally, the study may provide practical insights for educators and curriculum designers seeking to enhance the holistic development of students within the Sri Lankan education system. By examining the intersection between ethical teachings and soft skill development, this research contributes to broader discussions on how school education can cultivate not only academically capable students but also socially responsible and emotionally intelligent individuals.

2. Methodology

This study employed a systematic research methodology to investigate the contribution of the Buddhism curriculum to the development of students' soft skills within Sri Lankan secondary education. The methodological framework was designed to ensure reliability, transparency, and replicability of the research process. The following section describes the research approach, research design, research setting, sampling procedures, data collection instruments, and data analysis techniques used in the study.

Research Approach

The study adopted a mixed-method research approach, combining quantitative and qualitative techniques to obtain a comprehensive understanding of the research problem. Mixed-method research enables the integration of statistical measurement with contextual interpretation, allowing researchers to examine complex educational phenomena from multiple perspectives. According to Creswell and Plano Clark (2018), mixed-method designs are particularly appropriate in educational research where both measurable outcomes and participant experiences must be examined.

The quantitative component of the study was used to measure students' levels of selected soft skills, including communication ability, leadership qualities, and problem-solving capacity. The qualitative component was designed to explore

teachers' and school administrators' perspectives regarding the role of the Buddhism curriculum in promoting these competencies within classroom settings.

Research Design

The research followed a descriptive cross-sectional design. Descriptive research aims to systematically describe existing conditions, attitudes, and relationships among variables without manipulating the research environment (Creswell, 2014). This design was considered appropriate because the study sought to examine the current contribution of the Buddhism curriculum to students' soft skill development rather than to evaluate the effects of an experimental intervention.

The cross-sectional nature of the study indicates that data were collected from participants at a single point in time. This approach allowed the researcher to capture the present state of curriculum implementation and student competencies within the selected educational context.

Research Area

The research was conducted within the Gampaha Educational Zone in Sri Lanka, a region that includes a diverse range of secondary schools representing different administrative and demographic contexts. The zone contains both urban and semi-urban schools, providing a suitable setting for examining variations in curriculum implementation and classroom practices.

The selection of this research area was based on the presence of multiple government schools where Buddhism is taught as a subject within the national curriculum. This setting allowed the researcher to examine how Buddhist ethical teachings are delivered and experienced within typical school environments.

Sample Area and Sample Unit

The study focused on selected government secondary schools within the Gampaha Educational Zone. Schools were selected to represent different categories recognized in the Sri Lankan education system, including national schools and provincial schools. This selection ensured that the study captured variations in institutional resources, student populations, and administrative structures.

The primary units of analysis consisted of students, teachers, and school principals involved in the teaching and administration of the Buddhism curriculum.

The final sample included:

• 322 secondary school students studying Buddhism as a subject

• 30 Buddhism teachers responsible for delivering the curriculum

• 7 school principals representing administrative perspectives

Students constituted the primary group of respondents because the study aimed to evaluate the development of their soft skills. Teachers and principals were included to provide additional insight into curriculum implementation, teaching strategies, and institutional factors influencing student development.

Sampling Procedure

A stratified purposive sampling technique was employed to select participants for the study. Stratified sampling was used to ensure representation from different categories of schools within the educational zone. Within each selected school, purposive sampling was applied to identify participants directly involved in the Buddhism curriculum.

Student participants were selected from senior secondary classes where Buddhist ethical teachings are explored in greater depth. Teachers included in the study were required to have at least two years of experience teaching Buddhism in order to ensure familiarity with curriculum content and instructional practices.

Data Collection Methods

Data were collected through three complementary techniques:

1. Structured questionnaires
2. Semi-structured interviews
3. Classroom observations
4. The use of multiple data collection methods enabled methodological triangulation, which improves the credibility and validity of research findings.
5. Structured Questionnaire

A structured questionnaire was administered to student participants to measure their perceived levels of selected soft skills associated with the Buddhism curriculum. The questionnaire included Likert-scale items designed to assess competencies related to communication, leadership, emotional awareness, and problem-solving.

The instrument was developed with reference to established frameworks for soft skill assessment in educational research (Brackett et al., 2021). Minor contextual modifications were made to ensure that the items reflected ethical principles emphasized in the Sri Lankan Buddhism curriculum.

Each item was measured using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Questionnaires were administered during school hours in classroom settings under the supervision of the researcher.

Semi-Structured Interviews

Semi-structured interviews were conducted with Buddhism teachers and school principals to obtain qualitative insights into curriculum implementation and pedagogical practices. The interview guide included questions related to teaching methods, classroom interaction, and teachers' perceptions of the role of Buddhist ethical teachings in developing students' interpersonal competencies.

Semi-structured interviewing allows researchers to explore participants' experiences in depth while maintaining consistency across interviews (Kvale & Brinkmann, 2015). All interviews were conducted in person and recorded with the consent of participants to ensure accurate transcription and analysis.

Classroom Observations

Classroom observations were carried out to examine teaching practices during Buddhism lessons. Observational data focused on teacher–student interaction, use of moral narratives, opportunities for discussion, and student participation in classroom activities. These observations helped contextualize the questionnaire and interview findings by providing direct evidence of how ethical teachings were delivered in classroom settings.

Data Analysis

Quantitative data obtained from the questionnaires were analyzed using IBM SPSS Statistics software (Version 26.0) (IBM Corp., Armonk, NY, USA). Descriptive statistical techniques, including frequency distributions, mean scores, and standard deviations, were used to summarize student responses and identify patterns related to soft skill development.

Qualitative data collected through interviews and classroom observations were analyzed using thematic analysis. Thematic analysis involves systematically identifying recurring patterns or themes within qualitative data (Braun & Clarke, 2006). Interview transcripts and observational notes were carefully reviewed to identify themes related to curriculum implementation, pedagogical strategies, and student behavioral outcomes.

The integration of quantitative and qualitative findings allowed for a comprehensive interpretation of the research problem and strengthened the validity of the overall conclusions.

3. Results

This section presents the principal findings of the study concerning the contribution of the Buddhism curriculum to the development of students' soft skills. The results are

presented in accordance with the objectives of the research and include both quantitative and qualitative analyses. Quantitative data were analyzed using descriptive and inferential statistical procedures, while qualitative findings were derived through thematic analysis of interview and observational data.

Quantitative Results

Quantitative data collected through structured questionnaires were analyzed using IBM SPSS Statistics Version 26.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics, including mean values and standard deviations, were used to summarize student responses. These statistical measures provide an effective method for identifying patterns in Likert-scale data and evaluating the perceived influence of the Buddhism curriculum on different dimensions of soft skill development.

In addition to descriptive statistics, Pearson correlation analysis was conducted to examine relationships between selected soft skill dimensions. Pearson correlation is commonly used to measure the strength and direction of association between continuous variables in social science research.

The questionnaire assessed four key soft skill dimensions related to Buddhist ethical teachings: communication competence, empathy and emotional awareness, leadership qualities, and problem-solving abilities.

Communication Skills

Communication competence was measured using indicators related to respectful speech, active listening, and participation in group discussions. These competencies are conceptually linked to the Buddhist ethical principle of Samma Vaca (Right Speech), which emphasizes truthful and respectful communication.

Table 1. Student Perceptions of Communication Skill Development

Indicator	Mean	SD	Interpretation
Ability to express ideas respectfully	3.76	0.81	High
Active listening during discussions	3.64	0.86	Moderate–High
Confidence in communicating with peers	3.52	0.90	Moderate

The results indicate that students perceive a relatively strong influence of Buddhist ethical teachings on their communication practices. The highest mean score was observed for respectful communication, suggesting that ethical teachings emphasizing responsible speech may positively influence students' interpersonal interactions.

Empathy and Emotional Awareness

Empathy and emotional awareness were measured through items related to compassion, emotional sensitivity, and understanding others' perspectives. These competencies correspond to the Buddhist concept of Metta (Loving-kindness).

Table 2. Student Perceptions of Empathy and Emotional Awareness

Indicator	Mean	SD	Interpretation
Understanding others' feelings	3.85	0.74	High
Showing compassion toward peers	3.79	0.78	High
Emotional self-awareness	3.68	0.82	Moderate–High

The results suggest that empathy-related competencies are among the strongest soft skills reported by students. These findings indicate that Buddhist ethical teachings emphasizing compassion and kindness may contribute significantly to students' emotional awareness and interpersonal sensitivity.

Leadership Skills

Leadership competencies were evaluated using indicators related to responsibility, decision-making ability, and willingness to guide group activities. These characteristics reflect ethical leadership values embedded within Dasa Raja Dhamma.

Table 3. Student Perceptions of Leadership Skill Development

Indicator	Mean	Sd	interpretation
Responsibility in the group activities	3.58	0.88	Moderate High
Ability to guide group work	3.41	0.92	Moderate

Confident in decision-making	3.36	0.94	Moderate

Compared with empathy and communication competencies, leadership skills show slightly lower mean values. This suggests that while students understand ethical leadership principles conceptually, their opportunities to demonstrate leadership behavior may be limited within classroom settings.

Problem-Solving Skills

Problem-solving skills were measured using items related to ethical reasoning, conflict resolution, and reflective decision-making.

Table 4. Student Perceptions of Problem-Solving Skills

Indicator	Mean	SD	Interpretation
Thinking carefully before making decisions	3.62	0.85	Moderate–High
Resolving conflicts peacefully	3.48	0.89	Moderate
Applying ethical principles in problem situations	3.44	0.91	Moderate

These results suggest that students possess moderate levels of problem-solving ability influenced by ethical reflection. However, the practical application of ethical principles in complex situations appears to be less consistent.

Correlation Analysis of Soft Skill Dimensions

To further examine relationships among soft skill competencies, Pearson correlation analysis was conducted between the four dimensions measured in the study.

Table 5. Correlation Matrix of Soft Skill Dimensionsp < 0.01

Variables	Communication	Empathy	Leadership	Problem-Solving
Communication	1			

Empathy	0.62**	1		
Leadership	0.55	0.49	1	
Problem-Solving	0.58	0.53	0.60	1

The correlation analysis reveals statistically significant positive relationships among all four soft skill dimensions. The strongest correlation was observed between communication and empathy (r = 0.62), suggesting that students who demonstrate higher emotional awareness also tend to show stronger communication abilities. Leadership and problem-solving skills were also positively correlated (r = 0.60), indicating that decision-making competencies are closely associated with leadership behaviors.

These findings suggest that soft skills are interconnected competencies rather than isolated attributes, reinforcing the importance of holistic educational approaches.

Qualitative Results

Qualitative data obtained through interviews with teachers and school principals, as well as classroom observations, were analyzed using thematic analysis following the procedures described by Braun and Clarke (2006). The analysis involved several stages including transcription, initial coding, category development, and identification of overarching themes.

Coding and Data Organization

Interview transcripts and observational notes were first examined to identify meaningful statements related to Buddhist education and student development. These statements were coded according to recurring concepts such as “ethical communication,” “moral reflection,” “teacher-centered teaching,” and “limited student participation.”

Codes were subsequently grouped into broader categories that reflected recurring patterns within the data.

Emerging Themes

Three major themes emerged from the qualitative analysis.

1. Ethical Awareness among Students

Teachers consistently reported that Buddhist education helps students develop awareness of moral values such as compassion, honesty, and respectful communication. Classroom observations also revealed that students demonstrate positive attitudes toward ethical discussions.

2. Narrative-Based Moral Learning

Observational data indicated that teachers frequently use stories from the life of the Buddha and Jataka tales to illustrate moral values. These narratives function as moral exemplars that encourage reflection on ethical behavior.

3. Limited Opportunities for Behavioral Practice

Despite the ethical richness of the curriculum, many teachers indicated that classroom teaching remains examination-oriented. As a result, opportunities for students to practice communication, leadership, and collaborative problem-solving are relatively limited. Classroom observations confirmed that lessons often relied on lecture-based instruction rather than participatory learning activities.

Summary of Key Findings

The findings reveal several significant patterns relevant to the objectives of the study. First, Buddhist ethical teachings appear to contribute strongly to the development of empathy and respectful communication among students. Second, leadership and problem-solving competencies demonstrate comparatively moderate levels of development, suggesting that students may understand ethical concepts theoretically but have fewer opportunities to apply them behaviorally.

This pattern supports the existence of a Cognitive–Behavioral Gap, where students possess strong conceptual knowledge of ethical principles but demonstrate more limited practical expression of soft skills within educational settings.

4. Discussion

The findings of this study provide substantial support for the central hypothesis that the Buddhism curriculum contributes positively to the development of selected soft skills among secondary school students. The quantitative and qualitative evidence suggests that Buddhist ethical teachings influence students' interpersonal awareness, emotional sensitivity, and communication behavior. However, the data also indicate that this contribution is not uniform across all soft skill dimensions, particularly in relation to leadership and practical problem-solving competencies.

The partial nature of this support highlights an important educational dynamic. While the ethical philosophy embedded within the Buddhism curriculum appears to facilitate the development of emotional awareness and respectful communication, the translation

of these ethical principles into behavioral competencies may be influenced by broader pedagogical and institutional factors. This observation aligns with previous research suggesting that ethical knowledge alone does not automatically produce behavioral change unless supported by experiential learning opportunities (Brackett et al., 2021).

One possible explanation for the observed patterns lies in the nature of Buddhist ethical instruction within classroom environments. Ethical teachings such as Metta (loving-kindness) and Samma Vaca (right speech) emphasize internal reflection and moral awareness, which may explain the relatively strong development of empathy and respectful communication observed among students. Emotional intelligence theory also supports this interpretation. Goleman (1998) argues that emotional awareness and empathy often develop through reflective processes that encourage individuals to recognize the emotional states of themselves and others. The conceptual overlap between these psychological constructs and Buddhist ethical teachings may therefore contribute to the development of interpersonal sensitivity among students.

However, the relatively moderate development of leadership and problem-solving competencies suggests that ethical awareness alone may not be sufficient to cultivate behavioral skills that require active practice. Social learning theory provides insight into this phenomenon. According to Bandura (1977), individuals develop behavioral competencies through observation, imitation, and direct engagement with social environments. Although Buddhist education frequently includes moral narratives such as Jataka stories, the opportunities for students to apply these values through collaborative learning, decision-making activities, or leadership roles within the classroom may remain limited.

This interpretation is consistent with previous empirical studies in education. For example, Schonert-Reichl (2023) found that social and emotional learning programs produce stronger behavioral outcomes when ethical concepts are integrated with participatory classroom practices. Similarly, Liestyowati (2024) reported that emotional intelligence-based instructional strategies improve communication and collaboration when students actively engage in problem-solving and group interaction. These findings suggest that the pedagogical context in which ethical teachings are delivered plays a critical role in determining their practical impact on student behavior.

The study also provides evidence supporting the interconnected nature of soft skills. The correlation analysis conducted in this research revealed statistically significant relationships among communication, empathy, leadership, and problem-solving competencies. Although correlation analysis does not imply causation, the observed associations suggest that improvements in one dimension of soft skills may contribute to improvements in others. For instance, students who demonstrate greater emotional awareness may also be better equipped to communicate effectively and engage in

collaborative problem-solving. Such relationships reinforce the idea that soft skills function as an integrated set of competencies rather than as isolated attributes.

While the findings provide valuable insight into the potential role of Buddhist ethical education in soft skill development, several methodological considerations must be acknowledged. One potential source of bias relates to the use of self-reported questionnaire data. Self-report measures may be influenced by social desirability bias, where respondents provide answers that reflect socially acceptable behavior rather than their actual experiences. Given that Buddhist education emphasizes moral conduct, students may have been inclined to report higher levels of ethical behavior than they consistently demonstrate in practice.

Another potential limitation concerns the cross-sectional design of the study. Because data were collected at a single point in time, the research cannot establish causal relationships between the Buddhism curriculum and soft skill development. Longitudinal research designs may provide a more accurate understanding of how these competencies evolve over time.

Measurement precision also represents an important methodological consideration. Although the questionnaire instrument was developed with reference to established soft skill frameworks, variations in students' interpretations of Likert-scale items may influence response patterns. Additionally, the study relied primarily on descriptive statistics and correlation analysis. While these statistical procedures are appropriate for identifying patterns and associations within the data, they do not provide a comprehensive explanation of causal mechanisms.

The number of statistical tests conducted in this study was limited, reducing the likelihood of inflated Type I error rates. However, overlap among soft skill dimensions may influence correlation patterns because competencies such as communication, empathy, and leadership share conceptual similarities. Future research could apply more advanced statistical techniques, such as structural equation modeling, to explore the relationships among these competencies in greater depth.

Despite these limitations, the overall validity of the findings is supported by the integration of multiple data sources. The use of methodological triangulation, combining questionnaires, interviews, and classroom observations, helped strengthen the credibility of the conclusions. Qualitative findings from teachers and school principals also supported the quantitative patterns observed in the survey data, suggesting that the results reflect genuine educational experiences rather than purely statistical artifacts.

The importance of these findings lies in their implications for both educational theory and educational practice. From a theoretical perspective, the study contributes to the

growing body of research examining the relationship between ethical education and soft skill development. By integrating Buddhist ethical philosophy with contemporary educational theories such as emotional intelligence and social learning, the study demonstrates how traditional moral teachings may contribute to modern competency-based education.

From a practical perspective, the findings highlight the potential of the Buddhism curriculum to serve as a valuable platform for holistic student development. However, the results also suggest that curriculum content alone is insufficient to fully cultivate behavioral competencies. Educational strategies that incorporate participatory learning methods, reflective discussion, and collaborative problem-solving may be necessary to bridge the gap between ethical knowledge and practical skill development.

In this sense, the study underscores the importance of addressing what may be described as the Cognitive–Behavioral Gap in educational contexts. While students appear to acquire strong theoretical understanding of ethical principles, the practical application of these values requires learning environments that encourage active engagement, critical reflection, and interpersonal interaction.

Overall, the findings of this study provide important insights into the role of Buddhist ethical education in fostering students' interpersonal and behavioral competencies. By examining the relationship between ethical teachings and soft skill development, the research contributes to broader discussions on how school education can support not only academic achievement but also the formation of socially responsible and emotionally intelligent individuals.

5. Conclusion

This study examined the contribution of the Buddhism curriculum to the development of students' soft skills within Sri Lankan secondary education. The findings indicate that Buddhist ethical teachings can play a meaningful role in fostering interpersonal awareness, emotional sensitivity, and respectful communication among students. These competencies correspond closely with ethical principles embedded in Buddhist philosophy, including compassion, mindfulness, and responsible speech. The study therefore supports the view that religious and moral education can function as an important component of holistic student development.

At the same time, the findings suggest that the influence of the Buddhism curriculum on soft skill development is not uniform across all competencies. While students demonstrate relatively strong emotional awareness and empathy, the development of leadership and practical problem-solving abilities appears comparatively moderate. This pattern highlights a potential gap between students' conceptual understanding of ethical teachings and their practical ability to apply these principles in real-life

situations. The existence of this Cognitive–Behavioral Gap suggests that ethical knowledge alone may not be sufficient to cultivate behavioral competencies unless supported by appropriate pedagogical practices.

The results therefore emphasize the importance of instructional approaches that move beyond examination-oriented teaching toward more participatory and experiential learning environments. Classroom strategies such as collaborative learning activities, ethical debates, reflective discussion, and problem-based learning may provide students with opportunities to apply ethical principles in practical contexts. By integrating these pedagogical approaches with the existing ethical content of the Buddhism curriculum, schools may enhance the development of communication, leadership, and problem-solving skills among students.

The study also contributes to broader discussions in humanities education and curriculum studies by demonstrating how traditional ethical philosophies can be integrated with contemporary educational frameworks such as emotional intelligence and social learning. These findings suggest that religious education subjects may provide valuable opportunities for cultivating interpersonal competencies that support both personal development and social harmony.

Despite these contributions, the study has several limitations. The cross-sectional research design limits the ability to establish causal relationships between the Buddhism curriculum and soft skill development. In addition, the reliance on self-reported data may introduce potential response bias. Future research may benefit from longitudinal designs and the use of additional behavioral assessment methods to examine how students' soft skills evolve over time.

Further research could also explore how different teaching methods influence the effectiveness of Buddhist ethical education in developing student competencies. Comparative studies across different educational zones or cultural contexts may provide deeper insight into the relationship between ethical education and soft skill development.

Overall, the findings of this study highlight the potential of the Buddhism curriculum to contribute to the holistic development of students within the Sri Lankan education system. By strengthening the connection between ethical teachings and experiential learning practices, educational institutions may better prepare students to become socially responsible, emotionally intelligent, and ethically grounded individuals capable of contributing positively to society.

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Chapter 11: From Hashtags to Hostility: Digital Nationalism and Youth Radicalization in Contemporary Conflicts

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Abstract

Social media has fundamentally reshaped how national identity is constructed, how conflict is consumed and how young drawn toward political extremism. This chapter examines digital nationalism, the deliberate deployment of digital platforms to construct, amplify and mobilize nationalist sentiments and its relationship to youth radicalization across three contemporary conflict contexts: Hindu nationalism in India, the Russia-Ukraine information conflict and the Israel-Palestine/Gaza war. Using a qualitative comparative case study design with a most-different systems logic, and drawing on peer-reviewed academic literature, institutional reports and platform-level data published between 2019 and 2025, the chapter identifies four structural mechanisms through which digital platforms accelerate radicalization regardless of ideological entry point: algorithmic amplification, echo chamber construction, state and Para-state content coordination and governance vacuums. These mechanisms, conceptualized collectively as the Digital Radicalization Infrastructure (DRI), operate consistently across all three cases despite their substantial ideological, cultural, and institutional differences. The chapter also examines user agency commonly under theorized in structural accounts. As a moderating variable that shapes whether and how platform exposure translates into radicalized behavior. Counter-radicalization responses are found to be nationally fragmented, institutionally underfunded, and structurally inadequate for addressing transnational digital radicalization pipelines. Evidence-based recommendations are developed at the platform, national and international governance levels.

Keywords: Algorithmic amplification, Digital governance, Digital nationalism, Social media Governance, Youth radicalization

1. Introduction

The study of political radicalization has historically centered on physical spaces: mosques, prisons, community organizations and party networks. Over the past two decades, this geography has changed substantially. Social media platforms have altered the conditions under which political identities are formed, contested, and mobilized, and young people developmentally at a stage where identity formation is most intense; have been disproportionately affected by this shift.

Digital nationalism as understood in this chapter refers to the deliberate use of digital platforms to construct, amplify, and mobilize nationalist identities and discourses. It differs from earlier forms of nationalist politics in three ways. First, recommendation algorithms deliver ideologically tailored content to individual users at a scale that mass-media broadcasting could not approach. Second, platform content frequently appears to originate organically from peers and communities while being systematically shaped by state, Para-state, or organizational actors. Third, youth participation occurs within environments optimized for behavioral engagement measured in watch time, shares, and reactions rather than for civic knowledge or deliberative accuracy.

The practical consequences of this shift are documented in intelligence records. In August 2024, Austrian authorities arrested three teenagers aged 17, 18, and 19 for planning an attack on a Taylor Swift concert in Vienna. Investigators established that their radicalization trajectory was attributable primarily to closed digital ecosystems they had inhabited following the Gaza conflict escalation of October 2023. Separately, the Solingen attacker, whose radicalization was confirmed as primarily online, killed three people at a public festival in Germany weeks later. These cases are relevant not as isolated anecdotes but as documented endpoints in radicalization processes that intelligence agencies traced backward through platform activity patterns.

This chapter examines the structural conditions that produce such outcomes. Its central argument is that digital radicalization is not primarily an individual psychological event but a structural outcome of platform design, commercial business incentives, state content strategies, and governance failures. The same platform architecture that enables Hindu nationalist mobilization in India via WhatsApp enables Russian imperial nationalism via Telegram and jihadist content distribution via TikTok in post-October 7 Europe not because ideological content is equivalent, but because the underlying technical infrastructure is identical.

Three cases are examined: India (digital nationalism with state adjacency), Ukraine (state-directed information conflict), and Gaza/Middle East (conflict-period platform stress-testing). These cases differ in ideological character, state governance context, platform mix, and cultural setting. The identification of consistent radicalization

mechanisms across all three strengthens the argument that those mechanisms are structural rather than contingent on any particular political environment.

The chapter does not argue that platform architecture alone determines radicalization outcomes. User agency, offline social environments, individual psychological histories, and pre-existing ideological commitments all mediate whether platform exposure produces radicalized behavior. However, current governance frameworks national in jurisdiction, peacetime in design, and commercially disinclined to address engagement-driven extremism are structurally unable to contain the problem even where political will exists.

2. Literature Review

2.1 Radicalization Theory: From Sequential Models to Algorithmic Environments

The foundational models of radicalization were developed before social media existed and carry that limitation. Wiktorowicz (2004), studying Salafi-jihadist networks in Britain, proposed a cognitive opening model in which radicalization begins when a personal, social, or political crisis renders an individual receptive to new ideological frameworks. Moghaddam (2005) extended this into a sequential metaphor of escalating commitment, depicting radicalization as a ladder-like process requiring repeated physical contact with radical communities. Both models remain useful for understanding individual psychological trajectories but assume spatial proximity and organized recruitment that are no longer necessary preconditions for radicalization.

Sageman (2008) introduced the first serious corrective by arguing that online radicalization could be decentralized and peer-driven without top-down organizational direction. Neumann (2013) qualified this by pointing out that online spaces are not ideologically neutral, motivated actors with radicalization objectives actively shape the content environments within them. Sunstein (2017) and Pariser (2011) then developed the architectural critique: algorithmic personalization creates closed information environments in which dissenting viewpoints are systematically filtered out. Ribeiro et al. (2020) and Hosseinmardi et al. (2021) demonstrated empirically, through large-scale analysis of YouTube recommendation data, that the platform's recommendation system progressively directs users from mainstream toward extreme content through watch-time optimization. Under these conditions, the cognitive opening that Wiktorowicz described as crisis-triggered is continuously generated by the platform itself, independent of external crisis events.

A persistent weakness across this literature is ideological soloing. Researchers studying Hindu nationalist radicalization, Russian information operations and jihadist online recruitment inhabit largely separate scholarly communities and rarely apply their

findings comparatively, which limits the development of structural theory that cuts across ideological cases.

2.2 Digital Nationalism

Billig's (1995) concept of banal nationalism the routine reinforcement of national identity through mundane symbols, predates digital platforms but provides a useful analytical baseline. Skey (2021) extends Billig into the social media context, arguing that algorithmic optimization transforms banal nationalism into an active, emotionally competitive performance of national identity. Brubaker (2017) adds a structural insight: digital platforms enable collective nationalist identity without the organizational infrastructure. Party membership, rally attendance, formal affiliation that regulatory attention typically targets.

Bradshaw and Howard (2019) documented coordinated inauthentic behavior, including state-sponsored troll farms and bot networks, across 70 countries, establishing that digital manipulation of nationalist sentiment is now routine in statecraft rather than exceptional. The theoretical literature on digital nationalism has been slow to incorporate this finding, continuing to frame nationalist online culture primarily as user-generated when substantial evidence now indicates deliberate production by state and Para-state actors.

2.3 Youth Vulnerability

Developmental research establishes that adolescence and early adulthood are periods when psychological needs for belonging, purpose, and in-group affiliation are most acute. Extremist content strategies consistently exploit these developmental characteristics, and this is documented across Hindu nationalist, jihadist, and far-right nationalist recruitment strategies. Digital platforms add quantitative scale: the capacity to identify and reach large numbers of developmentally vulnerable individuals that no physical recruitment operation could match.

Children and Screens (2024) documented one mechanism that earlier vulnerability research had not anticipated: gaming platforms generate high-trust social relationships through tactical interdependence before any personal relationship exists, inverting normal trust formation and creating heightened susceptibility to subsequent influence. The ADL (2024) found that 23 percent of online gamers had encountered right-wing extremist propaganda during gameplay. The Soufan Centre (2025) confirmed that youth radicalization is structurally present across diverse national and religious contexts, while the Global Terrorism Index (2025) documented the increasing prevalence of hybrid ideologies blending nationalism, religious grievance, conspiracy theory, and misogyny among young radicals. Complicating counter-radicalization frameworks designed around ideologically distinct categories.

2.4 Platform Governance

MacKinnon (2012), Gillespie (2018), and Zuboff (2019) each approach platforms as political actors from different angles. MacKinnon emphasizes that platforms exercise governance power without democratic accountability. Gillespie shows that content moderation decisions are editorial acts with ideological consequences shaped by commercial incentives. Zuboff grounds the analysis in business model architecture: platform revenue depends on behavioral modification, of which political radicalization is an extreme but structurally continuous expression.

Leerssen (2024) documents that the EU Digital Services Act, the most significant regulatory intervention till date has been slow in enforcement and cannot by design address cross-border radicalization pipelines spanning multiple jurisdictions without binding international law. A fundamental weakness common to this governance literature is that peacetime regulatory frameworks were not designed for conflict contexts in which state actors deliberately generate radicalization content at volumes that overwhelm any existing moderation infrastructure.

3. Research Gap And Objectives

Three gaps emerge from the literature reviewed. First, radicalization research is ideologically siloed studies of Hindu nationalist, Russian information warfare and jihadist radicalization rarely engage each other's frameworks, leaving structural cross-ideological mechanisms under theorized. Second, governance literature remains primarily diagnostic, it identifies regulatory failure without specifying what architecturally adequate alternative frameworks would require or what political conditions their implementation would demand. Finally third, the platform business model is systematically under theorized as a root cause. Treating algorithmic amplification as a technical malfunction misunderstands it: amplification of emotionally extreme content is not a system error but the predictable output of an engagement-optimization model functioning as designed.

This chapter addresses these gaps through four research objectives: to identify the structural mechanisms through which digital platforms accelerate youth radicalization across conflict contexts; to apply a unified analytical framework to three geographically and ideologically distinct cases; to assess existing governance responses for structural rather than merely political adequacy and to develop evidence-based recommendations at the platform, national and international governance levels.

Four research questions guide the analysis. What are structural mechanisms? Algorithmic, organizational, and political transform online nationalist sentiment into hostility and potential violence? How do the Indian, Ukrainian and Israel-Palestine/Gaza conflicts manifest these mechanisms across different ideological

and governance contexts? Where do existing regulatory frameworks fail, and why? What evidence exists for effective disruption of digital radicalization pipelines?

4. Methodology

4.1 Research Design

This chapter employs a qualitative comparative case study design. Following Yin (2018) and Gerring (2007), multiple-case designs are appropriate when the research objective is to identify structural mechanisms operating across diverse settings rather than to test hypotheses in statistical populations. The present study adopts most-different systems logic: the three cases India, Ukraine, and Gaza/Middle East are selected to differ maximally in ideology, state structure, platform ecology, and cultural context. When consistent mechanisms are identifiable across cases that differ on most relevant variables, the argument for structural rather than contextually specific causation is considerably strengthened. This is the specific inferential value of the case selection strategy, not simply geographic variety.

4.2 Case Selection Rationale

India was selected because it presents a case in which digital nationalist mobilization operates through networks closely aligned with governing political interests while maintaining organizational distance sufficient for deniability. This makes it the clearest available case of state-adjacent rather than state-directed digital nationalism and allows analysis of how governance failure can be politically motivated rather than merely institutional.

Ukraine was selected because it represents the most extensively documented instance of state-directed digital information operations targeting youth, conducted by an external aggressor against a civilian population within an active military conflict. It also presents a counter-case of documented resilience, which allows the limits of crisis-driven media skepticism to be assessed against institutionally grounded alternatives.

Gaza/Middle East was selected because the October 7, 2023 Hamas attack and Israel's subsequent military campaign produced a conflict-period digital environment of unprecedented intensity, engaging all four DRI mechanisms simultaneously and at high operational capacity. Its downstream radicalization consequences in third countries, primarily in Europe, are documented through intelligence records and independent academic research, making it the strongest available case for demonstrating cross-border structural effects.

4.3 Data Sources

Four categories of data are used. First, peer-reviewed academic literature published between 2019 and 2025, including sources from Humanities and Social Sciences Communications, Nature Communications, and CTC Sentinel. Second, institutional and policy reports like the UN Security Council CTED Trends Alert (October 2025), Global Terrorism Index (2025), Soufan Centre Intel Brief (September 2025), and Disinformation Resilience Index (2024). Third, platform-level analytical data, including Cyber security for Democracy/NYU's TikTok content ratio analysis and Generation Lab's experimental study on political attitude change. Fourth and final, official regulatory documents, including the EU Digital Services Act and publicly available intelligence assessments.

Source verification followed two principles. For academic sources, peer review and methodological transparency were prerequisites for inclusion. For institutional reports, the sourcing organization's documented track record of empirical work and transparent methodology was assessed before use. Where single-source claims appear in the analysis, this limitation is indicated.

4.4 Limitations

Three limitations are acknowledged. First, some sources cited are recent and have not yet accumulated significant scholarly citations; their inclusion is justified by institutional credibility and methodological transparency. Second, this is a document-based study; no primary data like interviews, surveys, or original content analysis was collected. Third, the study identifies correlational and, in several cases, traceable causal links between platform exposure and radicalization outcomes, but menopausal attribution should be treated with caution. Individual radicalization trajectories involve offline environments, social relationships, and psychological histories that document-based research cannot fully capture.

5. Conceptual Framework: The Digital Radicalization Infrastructure

The chapter proposes the concept of the Digital Radicalization Infrastructure (DRI) to describe the four structural mechanisms through which digital platforms enable and accelerate youth radicalization. These mechanisms do not operate sequentially; they function simultaneously and amplify each other. The DRI is distinguished from earlier radicalization models, which typically focus on individual psychological trajectories, organizational pipelines, or specific ideological content by locating the primary analytical weight at the level of platform architecture and governance structure rather than individual pathology or organizational intent.

Mechanism 1, Algorithmic Amplification: Recommendation systems on TikTok, YouTube, and Facebook are optimized for engagement metrics which are watch time, shares, comments, and reactions. Content that generates emotional responses, including

fear, outrage, tribal pride or perceived threat, consistently outperforms factual or analytical content on these metrics. Recommender systems therefore systematically direct users toward emotionally intense political content, progressively routing them toward material at the extreme end of any ideological spectrum regardless of where they started. This is not a malfunction, it is the predictable output of engagement maximization when applied to political content.

Mechanism 2, Echo Chamber Construction: Group-based platforms such as WhatsApp and Telegram, combined with algorithmically personalized feeds, create information environments in which exposure to moderating or dissenting viewpoints is structurally minimized. This operates both algorithmically and personalization filters suppress discordant content and socially, Where group membership creates social costs for expressing internal dissent. Within these environments, nationalist narratives are not routinely contested; they are amplified through competitive performance of ideological commitment.

Mechanism 3, State and Para-State Content Coordination: In all three cases examined, radicalization does not occur through purely organic cultural processes. State actors, Para-state organizations, and non-state extremist groups deliberately design and deploy content targeting specific youth demographics. Russia's Internet Research Agency, India's BJP-adjacent digital mobilization networks, Hamas's media operations, and Israel's military influence operations differ substantially in their institutional structure, relationship to formal state authority, and operational objectives treating these actors as institutionally equivalent would be analytically misleading. However, recognizing them as belonging to a common analytical category deliberate non-organic shaping of platform information environments is what the DRI framework proposes and the evidence supports.

Mechanism 4, Governance Vacuum: Platform content moderation operates at peacetime speed and scales in environments that active conflict fundamentally alters. Government regulatory frameworks are national in jurisdiction while radicalization pipelines are transnational in operation. Counter-radicalization institutions have in several national contexts been defunded rather than expanded. No binding international framework governs digital content operations during armed conflict. This vacuum is not passive; it is a structural condition that deliberate radicalization strategies explicitly exploit.

A fifth and last consideration an user agency cuts across all four mechanisms and requires explicit treatment, because structuralize accounts risk presenting radicalization as mechanically inevitable. Young people are not passive recipients of platform-delivered content. Individual psychological vulnerabilities, offline social environments, pre-existing ideological commitments, and active identity-seeking all mediate platform exposure. The DRI framework treats user agency as a moderating

variable: platform architecture raises the probability of radicalization exposure and amplifies its emotional intensity, but individual and social factors shape whether and how that exposure translates into radicalized behavior. This distinction matters for policy: interventions targeting only platform architecture, without community-level and individual-level components, will be structurally incomplete.

6. Case Analyses

6.1 India: State-Adjacent Digital Nationalism

India presents a case in which digital nationalist mobilization operates through organizational networks closely aligned with governing political interests while maintaining sufficient organizational distance from the state to preserve deniability. Networks associated with the Bharatiya Janata Party have developed digital infrastructure across WhatsApp, YouTube and Facebook that consistently circulates content framing Muslim communities as a demographic threat to Hindu society. The framing draws from ethno nationalist replacement narratives adapted to Indian demographic and electoral contexts.

WhatsApp is analytically central to this case. Its technical architecture end-to-end encryption, group-based distribution, and high penetration among rural and lower-income populations creates a distribution network that operates outside platform moderation visibility. The 2025 study published in Humanities and Social Sciences Communications, titled 'Locked in Echoes,' documented these dynamics in detail, establishing direct links between organizational content strategy and platform architecture in radicalization processes targeting Muslim youth in Delhi-area schools. The study found that extremist organizations use echo chambers as structured propaganda tools with strategic objectives that bear direct resemblance to historical divide-and-rule mobilization logic. Muslim students reported bullying from teachers and classmates is a measurable overflow from digital content environments into physical social spaces.

India's regulatory response has been selective in a politically significant direction. Government pressure on platforms has been consistently directed at content critical of the government rather than at content promoting communal hostility. Where the state benefits politically from a radicalization pipeline, national regulatory frameworks cannot be expected to function as self-correcting mechanisms. This asymmetry is itself an analytical finding: governance failure in this case reflects the specific incentive structure of governing parties rather than simply institutional incapacity.

6.2 Ukraine: Institutionalized Digital Information Conflict

The Russia-Ukraine conflict has been characterized by researchers as the first armed conflict in which the informational dimension is fully digitalized. What makes the case

analytically distinct is that both sides are actively producing digital nationalist content targeting youth, within what the Centre for International Governance Innovation terms the splintering, two mutually exclusive information universes operating simultaneously inside Russia's heavily managed media environment and outside it.

Russia's approach to digital nationalism is institutionalized and documented quantitatively. Between January 2024 and April 2025, a network of 3,634 inauthentic Telegram accounts posted over 316,000 pro-Russian comments across channels focused on Ukraine's occupied territories, with content tailored to local conditions and current events. Beyond automated activity, state-sponsored youth influencers on Telegram circulated patriotic content designed to construct a Russian national identity in which hostility toward Ukraine is structurally inseparable from patriotic self-identification. Russia's operation represents the clearest case examined in this chapter of a state treating a commercial social media platform as an instrument of youth identity formation with military strategic objectives.

TikTok's role in the Ukrainian conflict reveals a mechanism distinct from direct propaganda: the aesthetic normalization of military violence. Analysis of 826 TikTok videos relating to the conflict identified three content strategies, spectacularizing technical aspects of combat, normalizing military violence as a component of everyday life and aestheticizing violence through platform-specific editing formats. For young audiences consuming conflict content mediated through trending audio and visual conventions, the moral and historical weight of political violence becomes progressively detached from the content itself. This represents a form of attitudinal conditioning that operates below the threshold of explicit ideological recruitment.

Ukraine's documented resilience to Russian propaganda is ranking highest among 10 Central and Eastern European countries in the Disinformation Resilience Index (2024) and characterized in that research not as institutionally grounded but as crisis-driven. Only 29 percent of Ukrainians trust Telegram content despite Telegram being their dominant news platform. Structural dependence on a distrusted medium is not the same as media literacy and the resilience it produces will not persist after the crisis that currently sustains it.

6.3 Gaza/Middle East: Full-Spectrum Platform Stress-Testing

The Hamas attack of October 7, 2023 and Israel's subsequent military campaign produced a digital environment in which all four DRI mechanisms operated simultaneously and at high intensity. The conflict is analytically useful not because it is unique in kind but because it stress-tested platform governance frameworks at a scale that exposed structural weaknesses across moderation, algorithmic design and state actor behavior at the same time.

A Cyber security for Democracy and NYU study (2025) found that for every pro-Israel video on TikTok, approximately 17 pro-Palestinian videos appear, with this ratio remaining stable across the conflict period. A Generation Lab experiment found that American TikTok users under 30 who spent 30 minutes daily on the platform during the conflict were 17 percent more likely to espouse anti-Zionist opinions than non-users. This content ratio reflects algorithmic behavior: footage of civilian suffering generates high engagement and the recommender system distributes high-engagement content more widely. The outcome is politically consequential, but the mechanism is commercial rather than editorial.

Israel's conduct in the digital environment of the conflict represents a qualitatively different form of state content coordination than Russia's institutional bot operations or BJP-adjacent WhatsApp distribution networks, but belongs within the same DRI analytical category. Documented activities include an unauthorized Telegram channel publishing graphic conflict content, organized influencer networks for international narrative management, and a reported disinformation campaign targeting over 120 US lawmakers in 2024 (Politico). Israel's operations differ from Russia's in institutional structure, these were primarily state military operations rather than deniable information agency activities but represent deliberate non-organic shaping of conflict-period information environments.

The most direct evidence of downstream consequences appears in documented European radicalization cases. West Point CTC (2025) documented multiple European instances in which the October 7 conflict directly accelerated individual radicalization through a victimhood-revenge narrative spreading across platforms. The Vienna concert attack perpetrators had inhabited closed digital ecosystems dominated by Gaza-related content for months prior to their arrest. Kizilkaya (2025) additionally documented TikTok live streams in which Israeli teenagers expressed dehumanizing views toward Palestinians without the social inhibition that face-to-face accountability would impose demonstrating that digital dehumanization operated simultaneously on both sides of the conflict.

7. Cross-case Discussion

The three cases confirm the DRI framework's central proposition: the four mechanisms which are algorithmic amplification, echo chamber construction, state content coordination and governance vacuum operate consistently regardless of ideological orientation. Hindu nationalist radicalization in India, Russian imperial nationalist indoctrination targeting young Russians and jihadist radicalization in post-October 7 Europe all proceed through the same platform infrastructure. The ideological content differs; the structural mechanisms do not.

However, important distinctions among state actors must be preserved to avoid analytical imprecision. In Russia's case, the state directly administers digital nationalism through documented institutional infrastructure with military strategic objectives. In India's case, the relationship between governing political interests and digital nationalist networks is organizationally mediated and deniable, making it state-adjacent rather than state-directed. In Israel's case, documented digital operations were military and governmental in origin but oriented primarily toward international opinion management rather than domestic youth indoctrination. These distinctions matter for governance responses: accountability mechanisms appropriate for a state directly operating bot networks differ from those applicable to networks with organizational distance from the state.

User agency consistently emerges as a moderating rather than a determining variable. Platform architecture creates conditions for radicalization exposure; available evidence does not support the conclusion that it mechanically produces radicalized individuals regardless of individual and social context. Offline factors are peer relationships, family environments, local political conditions and prior ideological commitments significantly shape whether platform exposure translates into behavioral radicalization. Effective counter-radicalization strategies therefore require intervention at both levels: structural, targeting platform architecture and governance; and community-based, targeting offline social environments, educational institutions, and family support networks.

Ideologically specific counter-strategies address the content flowing through the DRI but not the infrastructure itself. Structural responses targeting algorithmic design, platform business models, and governance architecture are a necessary complement, not a substitute, for ideologically targeted interventions.

8. Findings

These following Six core findings emerge from the cross-case analysis. First, digital radicalization is structural in character rather than primarily individual. Young people encounter radicalization content because they are inside systems architecturally designed to maximize emotional engagement not because of individual psychological weakness or aberrant choice.

Second, the four DRI mechanisms operate consistently across ideologically diverse contexts. This consistency supports the argument that radicalization pipelines are driven by platform architecture rather than any specific ideological content, which means governance responses calibrated to individual ideologies will remain insufficient without structural complements.

Third, state and Para-state actors deliberately shape radicalization environments through content operations that vary in institutional form but share the characteristic of exploiting open commercial platform infrastructure for political objectives. The claim of platform neutrality is empirically unsupported in active conflict contexts.

Fourth, algorithmic content asymmetry in conflict contexts is commercially driven rather than editorially intentional. TikTok's Gaza content ratio reflects engagement optimization in a context where civilian suffering imagery generates high engagement; the political consequences are material regardless of whether the mechanism is editorial or commercial.

Fifth, governance frameworks are failing for structural reasons beyond political will. National jurisdiction over transnational pipelines, commercial incentive misalignment, and the absence of international binding frameworks in conflict contexts are structural features of current governance architecture, not correctable through political commitment alone.

Sixth and last, digital resilience where it exists is crisis-driven and institutionally fragile. Ukraine's documented resistance to Russian propaganda is contingent on the salience of an active military conflict rather than on media literacy capacity that would persist after conflict resolution.

9. Recommendations

9.1 Platform-Level Recommendations

Platform operators should be legally required under the EU DSA framework and equivalent national legislation to submit recommendation systems to independent third-party audit during declared periods of active armed conflict. Audit findings on content ratio, amplification patterns and engagement optimization behavior should be publicly reported. This addresses the most direct causal mechanism identified across all three cases.

Conflict-specific content moderation standards with higher staffing ratios, shorter review timelines and verified linguistic expertise should be a legal requirement rather than a voluntary operational adjustment during designated conflict periods. Applying peacetime moderation frameworks to active conflict content environments produces outcomes structurally equivalent to no moderation at scale.

Encrypted platform governance can be pursued through metadata regulation rather than content surveillance, addressing the tension between end-to-end encryption and radicalization prevention without compromising user privacy. Requiring platforms to limit forwarding chains, cap group sizes above defined thresholds and implement

sender-visible watermarking for mass-forwarded content targets distribution architecture rather than message content.

9.2 National-Level Recommendations

Counter-radicalization funding must be insulated from annual budget cycles that cut prevention investment in the absence of immediate visible crisis. Governments should establish multi-year, ring-fenced funding streams for community-based prevention programs. The documented reduction in US Countering Violent Extremism program resources in early 2025 reflects a broader pattern in which prevention costs are immediate and visible while benefits are diffuse and long-term, making them politically easy to cut and structurally dangerous to do so.

Inoculation-based media literacy education exposing young people to weakened forms of disinformation and extremist argumentation before they encounter them at full intensity, has a stronger evidence base than post-hoc fact-checking and should be incorporated as a mandatory component in national education curricula. This addresses the user-agency dimension of the DRI framework: building individual and social capacity to recognize and resist radicalization content without requiring users to identify it in real time under full emotional pressure.

Programs using former extremists to produce platform-based counter-narratives have demonstrated effectiveness in the Indonesian context. Governments and civil society organizations should invest in identifying, training and supporting credible voices with lived radicalization experience deploying them on the specific platforms where radicalization occurs rather than in formats that do not reach the relevant audiences.

9.3 International-Level Recommendations

The absence of binding international law governing digital content operations during armed conflict is a fundamental governance gap. An international framework potentially developed under UN auspices and grounded in existing International Humanitarian Law principles should establish minimum standards for state conduct in information operations, platform obligations during conflict periods and accountability mechanisms for documented state-directed disinformation campaigns.

Cross-border intelligence sharing on digital radicalization pathways must be explicitly incorporated into existing counter-terrorism intelligence frameworks. The European cases documented in this chapter involved radicalization pipelines crossing multiple national jurisdictions. Europol's Counter Terrorism Centre provides an existing institutional mechanism that is not currently resourced to address digital radicalization at the scale that available evidence now documents.

10. Conclusion

The relationship between digital platforms and youth radicalization is documented in the evidentiary record reviewed in this chapter with sufficient specificity to support structural policy intervention. In India, digital nationalist content circulates through family WhatsApp networks with the effective facilitation of governing political interests. In Russia, state-directed youth influencer networks on Telegram construct a national identity in which hostility toward Ukraine is framed as a patriotic obligation. In Europe, young people radicalized primarily through short-form video have committed acts of mass violence that intelligence agencies traced backward through documented platform consumption histories.

The governance gap identified in this analysis is, therefore not due to a lack of political attention. The pathways have been documented; the evidence base is robust and there are technically available policy options. The more insidious challenge is structural: platform business models are based on monetizing the vary engagement dynamics that radicalization exploits so far, no national regulatory framework has managed to realign these incentives toward public safety outcomes. In other words, this problem is not difficult due to ignorance but because there is no binding international accountability to meet the transnational scale of the radicalization pipelines that must be governed.

Counter-radicalization is not technically complex, the mechanisms are identified and the evidence base exists. What determines whether the structural conditions documented in this chapter are adequately addressed is whether the political costs of inaction, measured in documented acts of violence with traceable digital trajectories have become sufficient to shift the incentive calculations of platform operators and governing authorities.

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Chapter 12: Building Sustainable and Climate-Resilient Supply Chains

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Abstract

This chapter presents how climate change is reshaping supply chains and why organizations must think beyond efficiency-driven models toward sustainability and resilience. It begins by highlighting how climate-related disruptions ranging from extreme weather events to regulatory and market shifts create complex, interconnected risks that unavoidable in traditional supply chain designs. As global supply networks become more integrated, localized disruptions increasingly generate cascading effects across regions and industries. Sustainability focuses on minimizing the impacts, while resilience enhances the ability to adopt and recover from disruptions. Further, the chapter explores key environmental challenges, including climate risks, resource scarcity, and carbon emissions, alongside growing regulatory pressures. It highlights the important role of ESG (Environmental, Social, and Governance) integration in aligning business objectives with sustainability goals and improving organizational performance. Practical approaches such as green procurement, circular economy practices, sustainable logistics and blockchain are presented as enablers of sustainable supply chains. It also outlines resilience strategies, including risk assessment, diversification, flexibility, and data-driven decision-making.

Keywords: Supply Chains, Climate Resilience, ESG, Carbon Management, Green Procurement, Environmental Governance.

1. Introduction

1.1 Climate Change and Supply Chain Disruptions

Climate change has emerged as one of the most significant macro-environmental forces reshaping global economic systems, with supply chains being particularly exposed to its impacts (Christopher, 2016).Climate change poses a challenge to supply chains. Unlike issues companies face it affects multiple parts simultaneously and is hard to predict (Intergovernmental Panel on Climate Change, 2023). There are two types of risks: transition risks. Physical risks include storms and heatwaves. Transition risks involve changes in laws and consumer preferences (OECD, 2022).

Big storms like floods and hurricanes can severely disrupt supply chains (Ivanov, 2021). They can halt factory operations, damage infrastructure and delay deliveries (Christopher & Peck 2004). For instance a massive flood in a production hub can temporarily shut down production. A storm-closure of a port can cause global shipment delays (Christopher, 2016). This highlights the vulnerability of supply chains. They prioritize efficiency over resilience (Christopher, 2016).

The issue worsens with supply chains. A problem, in one area can have an effect (Christopher, 2016). As Christopher noted global supply chains are complex and interconnected (Christopher, 2016). This complexity increases the likelihood of one issue triggering another (Christopher & Peck 2004). Furthermore transition risks are significant. Governments are implementing regulations (OECD, 2022).

1.2 Need for Sustainable and Resilient Supply Chains

The traditional focus on cost efficiency and speed in supply chains is no longer sufficient amid growing climate uncertainties (Christopher, 2016). Firms now recognize the need for resilience alongside efficiency, as excessive cost-cutting can create rigidity and vulnerability (Christopher & Peck, 2004; Christopher, 2016). Sustainable supply chains integrate environmental, social, and economic considerations (Elkington, 1997; Carter & Rogers, 2008), while resilience ensures preparedness, adaptability, and recovery from disruptions (Ponomarov & Holcomb, 2009; Ivanov & Dolgui, 2020). Together, they foster stability and long-term viability (Marchese et al., 2018; Geissdoerfer et al., 2017).

1.3 Objectives and Scope

This chapter aims to provide a comprehensive analysis of sustainable and climate-resilient supply chains, focusing on the integration of ESG principles (Eccles et al., 2020). The objectives include:

- Examining the impact of climate change on supply chain systems (Ivanov, 2021)
- Developing a conceptual framework linking sustainability, resilience, and ESG

(Marchese et al., 2018)
• Identifying key environmental challenges and strategic responses (OECD, 2022)
• Exploring governance mechanisms and policy frameworks (World Economic Forum, 2020)
• Highlighting emerging trends and managerial implications (Queiroz et al., 2020)

The chapter adopts an interdisciplinary approach, integrating insights from supply chain management, sustainability studies, and strategic management (Barney, 1991).

2. Conceptual Framework

2.1 Sustainability and Climate Resilience in Supply Chains

Sustainability in supply chains refers to the incorporation of environmental and social considerations into traditional economic decision-making processes. It requires organizations to evaluate the environmental impact of their activities, including resource use, emissions, and waste generation (Elkington, 1997).

Climate resilience complements sustainability by focusing on the capacity of supply chains to withstand and adapt to disruptions. It involves building flexibility, redundancy, and adaptive capabilities into supply chain systems (Brandon-Jones et al., 2014).

The integration of sustainability and resilience has led to the development of climate-resilient supply chains, which aim to achieve long-term viability while minimizing environmental impact. These supply chains are characterized by adaptability, resource efficiency, and stakeholder engagement (Marchese et al., 2018).

2.2 Link between Sustainability and Resilience

Sustainability and resilience are closely interconnected concepts that reinforce each other. Sustainable practices, such as energy efficiency and waste reduction, enhance resilience by reducing dependency on scarce resources and minimizing exposure to environmental risks (Marchese et al., 2018). This interdependence highlights the importance of integrated strategies that align sustainability and resilience objectives, enabling organizations to achieve both environmental and economic goals (Carter & Rogers, 2008).

2.3 Key Theoretical Foundations (TBL, Stakeholder, Institutional)

The integration of sustainability and resilience is grounded in several theoretical frameworks:

• Triple Bottom Line (TBL): Emphasizes economic, environmental, and social performance (Elkington, 1997).
• Stakeholder Theory: Highlights the importance of addressing stakeholder interests

(Freeman, 1984).
• Institutional Theory: Explains the role of regulatory pressures and norms (DiMaggio & Powell, 1983).
• Resource-Based View (RBV): Suggests that sustainability capabilities can be a source of competitive advantage (Barney, 1991).

These frameworks provide a comprehensive foundation for understanding sustainable supply chain management (Carter & Rogers, 2008).

3. Environmental and Climate Challenges

3.1 Climate Risks and Extreme Events

Climate risks have become a central concern for supply chain management, as their frequency, intensity, and unpredictability continue to increase (Intergovernmental Panel on Climate Change, 2023; Ivanov, 2021). We can divide these issues into two main categories: sudden disasters, like severe storms, and slower problems, such as global warming and rising sea levels, which are getting worse over time (Intergovernmental Panel on Climate Change, 2023). According to the Intergovernmental Panel on Climate Change, 2023, both types of problems can affect how companies operate, disrupting production, transportation, and delivery (Intergovernmental Panel on Climate Change, 2023). For instance, extreme weather can damage infrastructure, making it hard to move goods around, while slower problems like climate change can lead to more frequent natural disasters, causing supply chain disruptions (Ivanov, 2021). As a result, companies need to find ways to adapt to these changes and minimize their impact on the environment and their operations (Christopher & Peck, 2004). This might involve investing in sustainable practices, like using renewable energy or reducing waste, to mitigate the effects of climate change and ensure a more stable future (Geissdoerfer et al., 2017).

Bad weather can be really tough on companies. I mean, think about it - floods, hurricanes, cyclones, and big fires can all damage the physical things that businesses need to operate, like factories, warehouses, roads, and ports (Ivanov, 2021). For instance, if a flood hits an area where a lot of companies are based, it can bring everything to a standstill for a long time (Intergovernmental Panel on Climate Change, 2023). And if a storm hits a major shipping route, it can cause delays and increase costs (Christopher, 2016). These problems don't just affect the present moment, either - they can also have long-term consequences and make things harder for companies all over the world (Christopher & Peck, 2004).

3.2 Resource Scarcity and Energy Issues

Resource scarcity represents another significant environmental challenge affecting supply chains (Geissdoerfer et al., 2017). The use of resources has gone too far and the

environment is getting damaged (OECD, 2022). This has caused problems with getting things like water, minerals and energy (Geissdoerfer et al., 2017). When we don't have enough of these things it costs more to run businesses (OECD, 2022). Its hard to plan for the future. This affects how well companies can compete with each other (Barney, 1991).

Water is a problem for industries like farming making clothes and manufacturing (OECD, 2022). They use a lot of water. If there is not enough it can cause big issues (Geissdoerfer et al., 2017). Mineral resources, like earth elements are also running out (Geissdoerfer et al., 2017). Contributes to climate change (Intergovernmental Panel on Climate Change, 2023). This makes supply chain problems even worse (Ivanov, 2021).

Switching to renewable energy sources like solar, wind and bioenergy is crucial for making supply chains sustainable and resilient (Geissdoerfer et al., 2017). Renewable energy reduces greenhouse gas emissions (Intergovernmental Panel on Climate Change, 2023). Makes energy more secure, by using different sources (OECD, 2022). Companies are now investing in energy- technologies and adopting circular economy practices to use fewer resources and create less waste (Geissdoerfer et al., 2017).

3.3 Carbon Emissions and Regulatory Pressures

Carbon emissions from supply chain activities are a major contributor to global greenhouse gas emissions, particularly in sectors such as transportation, manufacturing, and logistics (Intergovernmental Panel on Climate Change, 2023; McKinnon, 2018).

Government and international efforts to tackle climate change are pushing businesses to act responsibly (OECD, 2022). These policies encourage firms to account for emissions and adopt cleaner strategies, with tools like carbon pricing and emissions trading raising costs for pollution (Porter & van der Linde, 1995; OECD, 2022). In response, companies are reducing their carbon footprint through energy-efficient transport, cleaner fuels, and better emissions tracking (Geissdoerfer et al., 2017; McKinnon, 2018; Eccles et al., 2020). Beyond compliance, such actions enhance reputation, attract eco-conscious customers, and improve access to sustainable finance (Friede et al., 2015).

4. ESG Integration in Supply Chains

4.1 ESG Dimensions and Relevance

Environmental, Social, and Governance (ESG) integration has become a critical component of contemporary supply chain management, reflecting a transition toward more responsible and sustainable business practices (Eccles et al., 2020; World Economic Forum, 2020).

Firstly, protecting the environment requires reducing harm through efficient resource use and proper waste management across supply chains (Geissdoerfer et al., 2017). Firms increasingly adopt sustainable practices in sourcing, production, and transport (McKinnon, 2018; World Economic Forum, 2020). Equally important are social responsibility and transparent governance, ensuring fair treatment and ethical decision-making (Freeman, 1984; Eccles et al., 2020; Kolk, 2016). By doing so, they can maintain a positive reputation, build trust with their stakeholders, and contribute to a more sustainable future (Kolk, 2016).

4.2 ESG as a Strategic Tool

ESG is no longer confined to compliance or corporate social responsibility reporting; it has evolved into a strategic tool that enhances organizational performance and competitive advantage (Eccles et al., 2020). Firms that integrate ESG principles into their supply chain strategies can identify inefficiencies, reduce risks, and foster innovation (Carter & Rogers, 2008). For instance, adopting energy-efficient processes not only reduces environmental impact but also lowers operational costs (Geissdoerfer et al., 2017).

Empirical research indicates a positive relationship between ESG performance and financial outcomes, suggesting that sustainable practices contribute to long-term value creation (Friede et al., 2015). Furthermore, ESG integration enhances brand reputation and stakeholder trust, which are critical in highly competitive markets (Eccles et al., 2020). Organizations that proactively address ESG concerns are better positioned to adapt to regulatory changes and market expectations, thereby strengthening their resilience (Eccles et al., 2020; Marchese et al., 2018).

4.3 Stakeholder and Investor Role

Stakeholders play a central role in advancing ESG adoption across supply chains (Freeman, 1984). Investors increasingly apply ESG criteria, shaping more sustainable business practices (Friede et al., 2015), while consumers demand transparency about product origins (Kolk, 2016). Meanwhile, regulators promote standardized reporting frameworks to ensure accountability and comparability (OECD, 2022; Eccles et al., 2020).

5. Sustainable Supply Chain Practices

5.1 Green Procurement and Circular Economy

Green procurement has become a fundamental practice in sustainable supply chain management, focusing on sourcing environmentally friendly materials and selecting suppliers that adhere to sustainability standards (Carter & Rogers, 2008; Seuring & Müller, 2008). Organizations increasingly evaluate suppliers based on environmental

certifications, carbon footprints, and ethical practices (Seuring & Müller, 2008). In parallel, the circular economy concept promotes resource efficiency by encouraging reuse, recycling, and remanufacturing, thereby reducing waste and dependency on virgin resources (Geissdoerfer et al., 2017). These practices not only minimize environmental impact but also enhance supply chain resilience by reducing reliance on scarce raw materials (Marchese et al., 2018).

5.2 Sustainable Logistics and Operations

Sustainable logistics aims to reduce the environmental footprint of transportation and distribution activities (McKinnon, 2018). This includes optimizing routes, improving load efficiency, and adopting alternative fuels such as electric or hydrogen-based transportation (McKinnon, 2018). Additionally, sustainable operations focus on energy-efficient production processes, waste minimization, and eco-friendly packaging (Geissdoerfer et al., 2017). Organizations are increasingly adopting lean and green manufacturing techniques to improve operational efficiency while reducing emissions (McKinnon, 2018).

5.3 Role of Digital Technologies (AI, IoT, Blockchain)

Digital technologies play a transformative role in enabling sustainable supply chains (Queiroz et al., 2020). Artificial Intelligence (AI) enhances demand forecasting and inventory optimization, reducing waste and overproduction (Ivanov & Dolgui, 2020). The Internet of Things (IoT) enables real-time monitoring of goods, improving visibility and efficiency across supply chains (Queiroz et al., 2020). Blockchain technology enhances transparency and traceability, allowing organizations to verify the sustainability of products and ensure compliance with environmental and social standards (Queiroz et al., 2020). These technologies facilitate data-driven decision-making and support sustainability initiatives (Queiroz et al., 2020).

5.4 Supplier Collaboration

Supplier collaboration is critical for achieving sustainability goals, as supply chains involve multiple stakeholders operating across different regions (Seuring & Müller, 2008). Organizations are increasingly engaging in long-term partnerships with suppliers to promote shared sustainability objectives, information exchange, and joint innovation (Seuring & Müller, 2008). Collaborative practices such as supplier development programs, sustainability audits, and capacity-building initiatives help align suppliers with environmental and social standards (Seuring & Müller, 2008). Such collaboration enhances trust, improves performance, and strengthens the overall resilience of the supply chain (Carter & Rogers, 2008).

6. Climate Resilience Strategies

6.1 Risk Assessment and Preparedness

Risk assessment and preparedness form the foundation of climate-resilient supply chains (Ivanov, 2021; Intergovernmental Panel on Climate Change, 2023). To deal with climate change, companies need to look at all parts of their supply chain - from getting materials to making and delivering products. They have to find out what risks are related to climate change, figure out which ones are most important, and decide what to do about them (Intergovernmental Panel on Climate Change, 2023). These risks can come from changes in the weather, new rules, or trouble getting the resources they need (OECD, 2022). Having a good plan to assess these risks helps companies understand where they are vulnerable and how problems might affect their operations and money (Ivanov, 2021). This is important because climate change can cause a lot of disruptions, and companies need to be prepared (Christopher & Peck, 2004). By looking at all these factors, companies can make sure they are ready for the challenges that climate change might bring (Intergovernmental Panel on Climate Change, 2023).

To get ready for challenges, you need to come up with plans and strategies to reduce risks that you've found. This means setting up plans for emergencies, having enough supplies, and investing in strong infrastructure like warehouses and transportation systems that can handle extreme weather (Christopher & Peck, 2004). One way to do this is by using scenario planning, which lets organizations think about what could go wrong and figure out how to respond (Ivanov & Dolgui, 2020). According to Sheffi and Rice, who wrote about this in 2005, if organizations are prepared, they can bounce back quickly from disruptions and lose less (Sheffi & Rice, 2005). By being prepared, businesses can reduce the impact of unexpected events and keep running smoothly (Christopher & Peck, 2004).

Also integrating risk management into decision-making ensures that resilience's part of strategic planning (Barney, 1991). This requires working across functions continuously monitoring risk indicators and regularly updating contingency plans based on changing environmental conditions (Ivanov & Dolgui, 2020).

6.2 Supply Chain Diversification and Flexibility

Diversification and flexibility are key strategies for enhancing supply chain resilience in the face of climate uncertainties (Christopher & Peck, 2004; Ivanov, 2021). Diversification means getting materials and components from suppliers in different places. This way we don't rely on one source (Christopher & Peck, 2004). If something bad happens, like a flood or drought in one place we can still get what we need from another place (Ivanov, 2021).

Supply chains need to be flexible. Supply chains must remain adaptable when disruptions occur (Christopher & Peck, 2004). Firms can vary production and logistics methods, switching routes or locations as needed (Ivanov & Dolgui, 2020). Flexibility supports continuity, but excessive redundancy can be costly, so its benefits must justify the expense (Ivanov, 2021; Barney, 1991; Christopher & Peck, 2004).

6.3 Use of Data, Analytics, and Scenario Planning

The increasing availability of data and advanced analytics has transformed the way organizations manage supply chain risks (Queiroz et al., 2020). Data-driven decision-making helps companies anticipate risks, understand customers, and improve supply chain performance using analytics and machine learning (Ivanov & Dolgui, 2020). It enables quick responses to market changes, better planning through scenario analysis, and improved collaboration (Queiroz et al., 2020). As highlighted by Queiroz et al. (2020) and Ivanov and Dolgui (2020), these tools strengthen resilience and adaptability (Queiroz et al., 2020; Ivanov & Dolgui, 2020).

7. Governance and Policy Support

7.1 Government Regulations and Global Frameworks

Government regulations and international frameworks play a critical role in shaping sustainable and climate-resilient supply chains (OECD, 2022; World Economic Forum, 2020). Over the ten years people who make laws in many countries have created rules to help the environment (OECD, 2022). These rules are meant to reduce the things we put into the air use resources wisely and make companies produce and sell things in a way that is good for the planet (OECD, 2022).

Some of the tools these lawmakers use are things like carbon pricing, emission trading systems, environmental taxes and making companies tell us about their sustainability efforts (OECD, 2022). Global agreements like the Paris Agreement and the United Nations Sustainable Development Goals give countries and companies a plan to follow so they can work together to be more sustainable (World Economic Forum, 2020; OECD, 2022).

7.2 Corporate Governance and Sustainability Reporting

Corporate governance is a key enabler of sustainable supply chain practices, ensuring accountability, transparency, and ethical decision-making (Eccles et al., 2020). Effective governance structures integrate sustainability into corporate strategy, aligning organizational objectives with environmental and social goals (Eccles et al., 2020; Freeman, 1984).

Sustainability reporting has emerged as an essential tool for communicating ESG performance to stakeholders (Eccles et al., 2020). Frameworks such as the Global

Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and integrated reporting (<IR>) provide standardized guidelines for disclosing environmental and social impacts (Eccles et al., 2020).

Moreover, digitalization is transforming sustainability reporting by enabling real-time data collection and analysis (Queiroz et al., 2020).

8. Challenges and Future Directions

8.1 Implementation Barriers

Despite the growing emphasis on sustainable and climate-resilient supply chains, organizations face several challenges in implementing these practices (Seuring & Müller, 2008; Geissdoerfer et al., 2017). One of the biggest issues with switching to environmentally friendly practices is the high upfront cost (Geissdoerfer et al., 2017). Sustainable technologies, such as energy systems and energy-efficient equipment, can be really expensive (International Energy Agency, 2023). This is a major problem for medium-sized businesses, which often don't have the financial resources or technical expertise to make these changes (OECD, 2022). As a result, they can struggle to get started with going green, even if they want to (Geissdoerfer et al., 2017). It's a challenge that many companies face, and it can be tough to overcome, especially for smaller businesses that are already operating on tight budgets (Seuring & Müller, 2008).

One major problem is that the supply chain is really complex (Christopher, 2016). You've got a lot of people working together, but they're all based in different countries, which means they've got different rules and ways of doing things (Christopher, 2016). This makes it tough to keep track of whether everyone is sticking to the sustainability rules (Seuring & Müller, 2008). It's hard to make sure that everything is being done in a way that's good for the environment and fair for the people involved (Kolk, 2016). When you've got so many different people and countries involved, it can be really tricky to get everyone on the same page and following the same rules (Freeman, 1984).

8.2 Emerging Trends

Despite these challenges, several emerging trends are shaping the future of sustainable supply chains (Queiroz et al., 2020). One big trend is that companies are really committed to reducing their emissions to zero (International Energy Agency, 2023). Another important trend is green finance, where funding is linked to sustainability performance (Friede et al., 2015).

Technology is also changing things. Advances in tech like AI, blockchain and big data are making supply chains more transparent, efficient and resilient (Queiroz et al., 2020).

9. Managerial Implications and Conclusion

9.1 Strategic Recommendations

Managers need to integrate ESG metrics into performance evaluation and decision-making (Eccles et al., 2020). Investing in digital technologies enhances efficiency and responsiveness (Queiroz et al., 2020). Collaboration with suppliers improves sustainability outcomes (Seuring & Müller, 2008).

9.2 Key Insights and Way Forward

Sustainability and resilience are interconnected drivers of long-term competitiveness (Marchese et al., 2018). Organizations adopting these approaches improve risk management and performance (Friede et al., 2015).

10. Conclusion

The increasing intensity of climate change and sustainability pressures has fundamentally reshaped the landscape of supply chain management (Intergovernmental Panel on Climate Change, 2023; OECD, 2022). This chapter shows that old ways of running businesses are not enough to deal with problems (Christopher, 2016).

Resilience strategies like diversification, flexibility and data-driven planning are crucial in helping businesses prepare for and respond to disruptions (Ivanov, 2021). Governance mechanisms and policy frameworks support this change by providing guidance and promoting accountability (World Economic Forum, 2020).

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Chapter 13: The Role of Positive Psychology in Enhancing the Mental Health of Special Educators: A Review

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Abstract
Special educators play a vital role in supporting the educational, social, and emotional development of students with special needs. However, their profession can lead to high levels of stress, burnout, and mental health challenges. Positive psychology, a scientific discipline focused on understanding and promoting well-being, offers a valuable framework to enhance the mental health of special educators. This review paper explores the role of positive psychology interventions in improving the well-being and resilience of special educators. By examining the existing research on positive psychology interventions, this paper highlights the potential benefits of cultivating positive emotions, strengths, and relationships among special educators. Furthermore, the paper discusses the implications of these interventions for the overall well-being and job satisfaction of special educators, ultimately contributing to the creation of supportive work environments in the field of special education. The completely balanced and harmonious functioning of a healthy mental life is the reflection of his mental health. Mental health does not only mean the absence of mental diseases but it is an effective coordination of both body and mind. Which is the result of integration between what a person sees, thinks and does. A mentally healthy person establishes a satisfactory relationship between himself and his environment by adapting his desires, ambitions, ideals etc. to the realities of life. Thus mental health is a state of balanced mood. Education is the basic basis of human development. Education is the only step by which a person can reach his desired goal. It is only through education that the physical, mental and spiritual powers and abilities of the child develop. Mr. Adams described education as a bipolar process, while D.V. Sir has described education as a three-faced process, in which teachers and curriculum have been kept as the three poles. In which the student's place is paramount. Because without students we cannot imagine teachers and curriculum. Today's students are the future citizens of tomorrow; hence it is necessary for us to provide good education and good environment to the students. External and

internal conditions affect the process of education. Whenever any one of the three teachers, students and curriculum is affected, all the others automatically get affected.

Keywords: positive psychology, special educators, mental health, well-being, resilience, job satisfaction.

Introduction

In the new century, positive psychology emerged as a new concept which focuses on elements like happiness, well-being, prosperity. Positive Psychology What exactly is wellness? And how can this be achieved? By exploring it, it works to improve the quality of life of the people. Under this, many works have been done on understanding positive emotions and positive diacritics. Sellingman's Parma model - expresses concepts such as positive emotion, engagement, connection, meaning and achievement in a detailed manner. Some previous research results show that positive psychology was known as the different perception of happiness and well-being among the cultures of different people in society. Wealth or glory affects human welfare and happiness only to a limited extent, but in the present scenario its meaning has changed because external resources or human desires, sense of happiness and welfare, are synonymous with narrow limits. Whereas in the present time, positive psychology believes that continuous happiness and well-being is not external but an indicator of internality and unlimited nature. The last lines addressed by Robert F0 Kennedy at Canisius University in the year 1968 focus on the objects that make life meaningful. It pays attention to only one aspect of understanding individuals, namely their weaknesses and distortions, but it seems like an illusion. What has happened to today's people? Looking at these human glands, positive psychology develops insight towards the 'dark side' of humans. Questions like what's right about people in the 21st century? What is the center of attraction of a person? Comes to the center of positive psychology. Positive psychology reveals an optimistic and positive thinking in a person. Due to which he gets completely inspired and makes himself successful in the decision of life. The attitude of a person full of positive thinking expresses the feeling of well-being and public welfare towards everyone. That is, a feeling like 'Vasudhaiva Kutumba am' gets prevalent in it. What is this research paper Positive Psychology? What are the paradigms of positive psychology? And focuses on questions like welfare concepts. The presented research paper throws light on the role of positive psychology in the educational and social life of a person Positive psychology is a branch of psychology that focuses on the positive aspects of human experience, such as happiness, well-being, strengths, virtues, and resilience. Positive psychology is connected with mental health in several ways:

1. Positive psychology can help people cope with mental health challenges by enhancing their positive emotions, optimism, hope, and self-compassion.
2. Positive psychology can also help prevent mental health problems by promoting healthy habits, such as exercise, meditation, gratitude, and social support.
3. Positive psychology can complement traditional mental health interventions by addressing the strengths and resources of individuals, rather than only their symptoms and deficits.
4. Positive psychology can foster a more holistic and balanced view of mental health, which includes not only the absence of illness, but also the presence of well-being and flourishing.

Special educators play a crucial role in supporting the academic, social, emotional, and behavioral development of students with special needs. They work with a diverse range of students, including those with learning disabilities, developmental delays, physical impairments, and emotional and behavioral disorders. Their commitment to providing individualized instruction and support to students with unique challenges is essential for fostering their growth and success.

However, the demands of the special education profession can be particularly taxing, leading to significant stress and mental health challenges for educators. Several factors contribute to the elevated risk of mental health issues among special educators:

1. High Emotional Demands: - Special educators often work with students who face significant difficulties and require intensive support. Witnessing the struggles and challenges faced by their students can lead to emotional exhaustion and feelings of helplessness.

2. Workload and Administrative Burden:- Special educators must manage large caseloads, prepare individualized education plans (IEPs), and collaborate with various stakeholders, including parents, therapists, and other educators. The administrative burden can contribute to feelings of overwhelm and stress.

3. Challenging Classroom Environments:- Special education classrooms may have diverse learning needs, behavioral challenges, and limited resources, making it challenging for educators to meet the individual needs of each student effectively.

4. Lack of Resources and Support:- some cases, special educators may experience a lack of resources, training, or support, which can lead to feelings of frustration and isolation.

5. Emotional Investment:- Building strong connections with students and investing emotionally in their progress can lead to heightened stress and feelings of responsibility for their well-being. The mental health and

well-being of special educators are of paramount importance for several reasons:

6. Educator Performance: - A positive mental state is crucial for educators to be effective in their roles. When educators are mentally healthy and emotionally resilient, they are better equipped to support their students and create an inclusive and supportive learning environment.

7. Student Outcomes: - Educator well-being is closely linked to student outcomes. When teachers are emotionally well and satisfied with their jobs, it positively impacts student engagement, motivation, and academic achievement.

8. Teacher Retention and Recruitment: - High levels of stress and burnout can lead to increased turnover among special educators. Fostering mental health and job satisfaction can improve teacher retention rates and make the profession more attractive to prospective educators.

9. Modeling Behavior: - Special educators serve as role models for their students. Demonstrating positive coping strategies and emotional regulation can positively influence students' social-emotional development.

10. Professional Development: - Prioritizing the mental health of special educators should be an integral part of ongoing professional development. It helps educators develop self-awareness, emotional intelligence, and resilience, which are essential skills for managing the challenges of their profession effectively.

Special educators can benefit from positive psychology in several ways to combat their mental pressure. Positive psychology can help them cope with stress and burnout by enhancing their positive emotions, optimism, hope, and self-compassion. It can also help them develop a positive and supportive relationship with their students, colleagues, and parents, which can improve their job satisfaction and performance.

Positive psychology can provide them with evidence-based strategies and interventions to foster their own well-being and that of their students, such as gratitude, kindness, mindfulness, and character strengths. It can also help them cultivate a growth mindset and a sense of purpose, which can increase their motivation and resilience.

Given the critical role special educators play in the lives of students with special needs, it is imperative to address the mental health challenges they face and provide the necessary support to promote their well-being and resilience. Positive psychology interventions offer promising approaches to enhance the mental health of special educators and create more supportive work environments within the field of special education.

Positive psychology is a scientific discipline that focuses on understanding and promoting well-being, resilience, and flourishing in individuals and communities. Unlike traditional psychology, which often focuses on diagnosing and treating mental illness, positive psychology emphasizes the study and enhancement of positive emotions, character strengths, and positive aspects of human functioning. Positive psychology is highly relevant to special educators as it provides valuable insights and interventions that can enhance their mental health, well-being, and job satisfaction. Here are some key aspects of positive psychology and their relevance to special educators:

1. Focus on Strengths: - Positive psychology emphasizes identifying and nurturing individuals' strengths and virtues. Special educators can benefit from recognizing and leveraging their unique strengths, such as empathy, patience, adaptability, and creativity, to effectively support their students with special needs. By focusing on strengths, educators can experience a sense of mastery and accomplishment, leading to increased job satisfaction.

2. Cultivating Positive Emotions: - Positive psychology recognizes the importance of positive emotions, such as joy, gratitude, hope, and compassion, in enhancing overall well-being. Special educators often face challenging situations and may experience emotional exhaustion or burnout. By incorporating strategies to cultivate positive emotions, such as practicing gratitude or engaging in acts of kindness, educators can counterbalance the negative emotions associated with their work and improve their emotional well-being.

3. Building Resilience: - Resilience is the ability to bounce back from adversity and effectively cope with stressors. Special educators encounter various challenges in their profession, including managing difficult behaviors, adapting to changing environments, and handling workload demands. Positive psychology interventions, such as resilience-building exercises, mindfulness practices, and cognitive reframing, can enhance educators' resilience and help them navigate the challenges they face with greater ease and effectiveness.

4. Positive Relationships and Social Support: - Positive psychology recognizes the significance of positive relationships and social connections in promoting well-being. Special educators can benefit from building supportive networks with colleagues, seeking mentorship or supervision, and fostering positive relationships with students and their families. Positive relationships provide emotional support, collaboration opportunities, and a sense of belonging, all of which contribute to improved job satisfaction and mental health.

5. Work-Life Balance and Self-Care:- Positive psychology emphasizes the importance of self-care and maintaining a healthy work-life balance. Special educators often dedicate significant time and energy to their students, sometimes at the expense of their own well-being. By prioritizing self-care practices, setting boundaries, and engaging in activities that promote personal fulfillment and rejuvenation, educators can sustain their mental health and prevent burnout.

Overall, positive psychology offers a holistic and strengths-based approach to support the mental health and well-being of special educators. By integrating positive psychology principles and interventions into their professional practice, special educators can enhance their job satisfaction, resilience, and overall quality of life, ultimately benefiting both themselves and the students they serve.

Conclusion:-

The mental health and well-being of special educators are important for maintaining an effective and inclusive educational environment. Special educators regularly deal with academic responsibilities, emotional demands, and the diverse needs of students with disabilities, which may increase stress and emotional pressure over time. In such situations, positive psychology can act as a supportive framework for improving their emotional stability and professional well-being.

The findings of this review suggest that positive psychology interventions encourage positive thinking, emotional resilience, self-awareness, and healthy interpersonal relationships among special educators. Practices such as gratitude exercises, mindfulness activities, strength-based approaches, and emotional support systems can help educators manage workplace stress more successfully. These approaches may also improve confidence, motivation, and satisfaction in their professional roles.

Moreover, creating a supportive institutional atmosphere through positive psychology-based programs can strengthen teachers' coping abilities and promote a healthier work culture in special education settings. Educational institutions should therefore focus on developing policies and support mechanisms that prioritize the mental and emotional wellness of educators.

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Chapter 14: A Study of AI-Driven Teacher Feedback and Reflective Practices in Enhancing EFL Academic Writing in Higher Education: A Case Study of ESEF Berrechid

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Abstract

This study examines the impact of AI-powered platforms and teacher-led reflective practices on English as a Foreign Language (EFL) writing among university students at Écoles Supérieures de l'Éducation et de la Formation (ESEF). The experimental group received automated feedback through Grammarly, while the control group received only traditional teacher feedback. The research assesses the effectiveness of teacher-mediated AI feedback, its influence on student engagement and motivation, and compares learning outcomes with conventional methods. Ninety-four students participated in a quasi-experimental design, assigned to either the experimental or control group. Writing performance was evaluated using pretest, posttest, and delayed posttest assessments. Students who received both AI and teacher feedback demonstrated significant improvements in writing proficiency, surpassing the control group on posttests ($p < .01$, Cohen's $d = .85$). Integrating AI-driven feedback tools, such as Grammarly, into EFL writing instruction enhances both immediate and sustained writing proficiency and supports learner motivation. The findings recommend that EFL teachers combine AI with reflective, teacher-mediated feedback to optimize student writing development in higher education.

Keywords: AI-Driven Feedback, EFL Writing, Grammarly, Higher Education, Reflective Practices

Introduction

Artificial intelligence (AI) is transforming feedback and reflective practices in academic writing for English as a Foreign Language (EFL) students in higher education. In Morocco, there is growing interest in AI-powered solutions, particularly for enhancing teacher feedback and student engagement. However, the combined effects of AI-driven teacher feedback and structured reflection in EFL writing remain underexplored at ESEF Berrechid, where innovative instructional methods are required. This study systematically evaluates these strategies to address this gap in EFL academic writing instruction. Effective EFL academic writing instruction relies on dynamic teaching, student motivation, and actionable feedback. AI tools provide timely, data-driven suggestions, while teacher guidance and reflective practice facilitate the effective application of feedback. These interventions promote self-regulation and deeper learning. Employing a quasi-experimental design, this study investigates whether integrating AI-driven feedback with teacher-guided reflection leads to greater writing improvement compared to conventional feedback methods. The research is guided by three questions:

1. To what extent does the use of AI-driven teacher feedback and reflective practices enhance EFL academic writing in higher education?

2. Are there statistically significant differences in EFL academic writing performance, as measured by pretest and posttest scores, between students exposed to AI-driven feedback with reflection and those receiving conventional feedback?

3. What is the magnitude of the effect size resulting from the integration of AI-driven feedback and teacher-guided reflection on students' EFL academic writing outcomes?

The objectives of this study are to: (1) evaluate the impact of AI-driven teacher feedback on ESEF students' academic writing achievement; (2) compare writing performance between control and experimental groups using pretest and posttest data; and (3) determine the statistical significance and practical effect size of AI-driven teacher feedback. The findings indicate that combining AI-driven teacher feedback with structured reflection enhances EFL academic writing in higher education. Focusing on ESEF Berrechid, this study offers practical guidance for educators, curriculum designers, and policymakers. The results suggest that integrating AI and reflective practices can personalize learning, foster students' writing proficiency, and support academic progress. These outcomes may inform university-level EFL writing policies and curricula in Morocco and similar contexts. The experimental design underscores the value of comparison groups and pretest-posttest measurement (Campbell & Stanley, 1963).

Literature Review

Theoretical Framework

This study examines how AI-driven teacher feedback influences the development of EFL writing proficiency among Moroccan learners. Grounded in Sociocultural Theory (Vygotsky, 1978) and recent models of technology-enhanced feedback, the research highlights the essential role of integrating AI and teacher mediation in advancing writing proficiency within Morocco's unique educational context (Baghit et al, 2024a; Baghit, 2026a).

Sociocultural Theory holds that learning occurs through social interaction and mediation, with feedback supporting student development. In writing, teacher feedback helps learners progress from basic accuracy to advanced skills such as organization and argumentation. In Morocco, this theory is particularly relevant, as local factors shape how students respond to feedback.

Technology-enhanced feedback models demonstrate that digital and AI feedback can extend teacher support. AI tools efficiently identify patterns and errors in writing. When combined with teacher input, AI feedback provides personalized assistance for a range of writing challenges. This approach leverages the speed of AI and teachers' expertise to enhance writing outcomes.

By integrating Sociocultural Theory and technology-enhanced feedback models, this study evaluates a blended intervention of AI-driven feedback and teacher mediation for Moroccan EFL writing instruction. By isolating the direct effects of AI-assisted support and the impact of teacher involvement, the research clarifies how cultural context and immediate feedback interact to improve student outcomes. This approach links theoretical foundations to practical application, guiding the development of a more effective and context-responsive EFL writing pedagogy.

Review of Recent Studies

Recent studies have examined the effectiveness of interventions in English language learning, with a focus on advances in AI feedback and addressing gaps in writing skills. The rapid integration of technology and artificial intelligence in language education is transforming core skill acquisition, particularly in writing. Recent research has evaluated the effectiveness of digital and AI-enhanced feedback (Baghit, 2026b).

García Botero et al. (2021) highlight that mobile applications and AI-driven platforms, such as those with speech recognition and adaptive feedback, support learner autonomy and motivation in listening. Although these tools personalize the listening experience, most studies emphasize engagement and self-regulation rather than directly assessing the impact of AI-generated feedback on listening comprehension outcomes.

Li et al. (2023) investigated the use of AI-powered speech assessment tools to deliver immediate, individualized feedback on EFL learners’ spoken output. The study

reported improvements in speaking fluency and positive learner attitudes toward AI feedback. However, it also identified challenges, including the need for more nuanced, context-aware feedback and the potential risk of overreliance on technology.

Tsai and Lee (2022) evaluated an AI-based reading platform that delivers adaptive feedback based on learners' responses to comprehension questions. The results indicated higher comprehension scores and greater motivation than in traditional instruction. The study suggests that AI can personalize learning, but recommends further research on long-term effects and transferability across genres.

Wang and Chen (2023) examined the use of an AI-powered speech recognition system to provide individualized feedback in EFL listening activities. Their quasi-experimental study found that learners who received AI-generated feedback demonstrated significantly improved listening comprehension and self-correction skills, underscoring AI's potential to enhance formative assessment of receptive skills (Wang & Chen, 2023).

Luo and Li (2022) investigated the impact of AI-driven automated feedback on EFL learners' spoken production using an AI speech evaluation tool. The results demonstrated notable gains in pronunciation accuracy, fluency, and learner confidence compared with traditional teacher-only feedback, highlighting the added value of instant, objective feedback from AI technologies.

Kim et al. (2023) explored an AI-augmented mobile application that provided personalized vocabulary quizzes and context-sensitive feedback. Learners who used the app outperformed their peers in vocabulary retention and usage, indicating that AI can effectively scaffold and personalize vocabulary learning (Baghit, 2026a; Kim et al., 2023).

Despite progress in language technology and AI, the combination of AI-driven feedback and teacher mediation for writing development is still underexplored, particularly in Morocco (Baghit, 2026c). This study addresses this gap by systematically analyzing the impact of blended human-AI feedback on advanced writing skills and student motivation. The findings highlight the importance of integrating adaptive AI with teacher expertise to optimize EFL writing instruction in diverse contexts.

Research Method

The study utilized a quasi-experimental design with pretest and posttest assessments for both the control group (CG) and experimental group (ExG). Participants were assigned using convenience sampling due to practical constraints, enabling evaluation of intervention effectiveness in authentic educational settings while acknowledging limitations in group equivalence. ESEF students from Berrechid who were accessible and willing to participate were included. Forty-seven students were assigned to each group, and both groups were comparable in demographics, prior academic achievement, and English proficiency.

Table 1

Demographic Characteristics of the Experimental and Control Groups

Variable	ExG (*n* = 47)	CG (*n* = 47)	Total (*N* = 94)
Institution	ESEF Berrechid	ESEF Berrechid	—
Male, *n*	12	11	23
Female, *n*	35	36	71

Note. Participants were randomly assigned to the experimental and control groups; *n = number of participants; ExG = Experimental Group, CG=Control Group.*

Source: Author's Creation

Setting

The research was conducted at the School of Education Sciences and Training (ESEF) in Berrechid, Morocco, during the 2025–2026 academic year. The six-week intervention was integrated into the existing English curriculum. The ExG participated in active learning, collaboration, and formative assessment, while the CG followed the standard curriculum.

Description of the Treatment

The intervention began with the ExG completing designated writing tasks as part of their English curriculum. After submitting initial drafts, texts were processed through Grammarly, which provided automated feedback on grammar, vocabulary, organization, and coherence. Teachers reviewed and modified this feedback to align with pedagogical objectives and cultural context, supplementing with additional comments as needed. The revised feedback was returned to students for further

revision. This iterative cycle of writing, AI analysis, teacher mediation, and student revision was repeated for each task. The CG completed the same writing tasks but received only traditional teacher feedback, without AI tools. This distinction enabled systematic comparison of writing proficiency and revision behaviors between groups.

Data Collection

Data collection followed a quasi-experimental design with CG and ExG. Both groups completed a pretest writing assessment to establish baseline proficiency. During the intervention, all students participated in writing tasks as part of their regular EFL curriculum. Drafts from the ExG were processed with Grammarly, and teachers provided feedback informed by the AI tool, while the CG received only traditional teacher feedback. After the intervention, both groups completed a posttest, followed by a delayed posttest several weeks later to assess retention and sustained improvement. All writing samples were scored using a standardized rubric. This process enabled rigorous comparison of writing development between groups and clear evaluation of the impact of AI-driven teacher feedback. To assess intervention effectiveness over time and between groups, a mixed-design ANOVA was employed, with time as the within-subjects factor and group as the between-subjects factor. This method allowed for comparison of performance changes within participants and between groups, as well as examination of main and interaction effects. Where significant effects were identified, post hoc t-tests determined specific differences. Effect sizes (Cohen's d) were calculated to assess the magnitude and practical significance of group differences. All analyses were conducted using specialized software to ensure validity and reliability.

Results

Descriptive statistics show that both groups began with comparable writing proficiency levels at pretest, indicating baseline equivalence between the ExG (M = 61.84, SD = 6.92) and the CG (M = 62.11, SD = 7.03). After the six-week intervention, the ExG exhibited a substantial increase in writing performance at posttest (M = 79.63, SD = 6.11), while the CG showed only moderate improvement (M = 67.42, SD = 6.87). At the delayed posttest, the ExG retained most of its gains (M = 77.21, SD = 6.48), whereas the CG displayed minimal retention growth (M = 66.15, SD = 6.94). These results indicate that AI-driven teacher feedback led to greater and more sustained improvements in students' writing proficiency.

Table 2

Descriptive Statistics for Writing Scores Across Testing Times by Group

ExG	Pretest	47	61.84	6.92
ExG	Posttest	47	79.63	6.11
ExG	Delayed Posttest	47	77.21	6.48
CG	Pretest	47	62.11	7.03
CG	Posttest	47	67.42	6.87
CG	Delayed Posttest	47	66.15	6.94

Note.M = mean; *SD* = standard deviation. Scores were based on the standardized writing rubric administered across the three testing occasions.

Source: Author's Creation

Table 3

Mixed-Design ANOVA for Writing Score

Time	2, 184	118.47	< .001	1.13
Group	1, 92	31.28	< .001	.58
Time × Group	2, 184	52.91	< .001	.77

sNote. Cohen's *f* values of .10, .25, and .40 represent small, medium, and large effect sizes, respectively.

Source: Author's Creation

The obtained effect sizes indicate very large practical effects of the intervention. The interaction effect between time and group yielded a Cohen's *f* of .77, well above the threshold for a large effect (*f* = .40), demonstrating that the AI-driven teacher feedback intervention had a strong influence on students' writing development over time. The main effect of time was also very large (*f* = 1.13), indicating substantial improvement in writing performance across the three testing occasions. The group effect showed a large effect size (*f* = .58), reflecting meaningful overall differences between the ExG

and CG. Values of .20, .50, and .80 represent small, medium, and large effects, respectively.

Table 4

Post Hoc Pairwise Comparisons for the Control Group

Pretest vs. Posttest	5.31	4.12	< .001	.60
Pretest vs. Delayed Posttest	4.04	3.21	.002	.47
Posttest vs. Delayed Posttest	1.27	1.14	.258	.17

Source: Author's Creation

A mixed-design ANOVA was conducted to evaluate the impact of AI-driven teacher feedback on students' writing proficiency across pretest, posttest, and delayed posttest assessments. The analysis revealed a statistically significant main effect of time, $F(2, 184) = 118.47$, $p < .001$, Cohen's $f = 1.13$, indicating substantial changes in writing performance over time.

A significant main effect of group was also found, $F(1, 92) = 31.28$, $p < .001$, Cohen's $f = .58$, suggesting meaningful differences between the ExG and CG. Most importantly, there was a significant interaction effect between time and group, $F(2, 184) = 52.91$, $p < .001$, Cohen's $f = .77$. This large effect indicates that students who received AI-assisted teacher feedback improved significantly more than those who received only traditional feedback.

Post hoc analyses demonstrated that the ExG achieved very large gains from pretest to posttest, $t(46) = 13.41$, $p < .001$, $d = 1.95$, and retained most of these gains at delayed posttest, $t(46) = 11.62$, $p < .001$, $d = 1.68$. By contrast, the CG showed only moderate improvement, with medium to small effect sizes.

These findings provide strong evidence that integrating Grammarly-supported teacher feedback substantially improved EFL students' writing proficiency and retention over time, directly addressing the study's research questions on the effectiveness of AI-driven feedback and group differences in academic outcomes. The ExG demonstrated greater gains in writing proficiency, both immediately after the

intervention and at the delayed posttest. These results align with recent research highlighting the positive impact of AI-generated feedback on writing development (Zhai & Wang, 2023). The blended feedback model adopted in this study, in which teachers mediated and contextualized AI suggestions, appears to have addressed limitations noted in previous studies regarding AI's capacity to foster complex writing skills (Shute, 2008; Wang & Li, 2020).

The literature on AI-enhanced feedback in other language skills supports these outcomes. For instance, AI-powered platforms have been shown to improve listening comprehension (Baghit et al., 2024b; Wang & Chen, 2023), spoken fluency (Luo & Li, 2022), and vocabulary development (Kim et al., 2023), primarily due to the immediacy and personalization they provide. This study extends these insights to writing, suggesting that the effectiveness of AI feedback is amplified when integrated with teacher expertise, particularly in socioculturally diverse contexts.

The theoretical framework underpinning this research—Sociocultural Theory (Vygotsky, 1978)—emphasizes the importance of mediation and scaffolding in learning. The intervention demonstrated that AI tools, when used in combination with teacher guidance, served as mediational instruments that supported students within their Zone of Proximal Development. The teacher's role in adapting AI feedback was crucial in making it pedagogically relevant and culturally appropriate for Moroccan learners, reinforcing the sociocultural perspective that learning is most effective when facilitated by knowledgeable others in meaningful contexts (Vygotsky, 1978).

Moreover, the sustained improvement observed at the delayed posttest aligns with Tsai and Lee's (2022) findings that AI-adaptive feedback contributes to long-term retention and motivation. The iterative process of receiving and revising based on blended feedback fostered learner autonomy and engagement, aligning with the formative assessment principles articulated by Shute (2008).

Importantly, this study addresses the research gap identified in the literature review, specifically the limited exploration of AI-driven teacher feedback for writing development in Moroccan EFL settings. By grounding the intervention in both current empirical research and sociocultural theory, the study demonstrates that blended feedback approaches can be effective and sustainable. However, these findings should be considered alongside the study's limitations, including its single-institution focus, reliance on Grammarly as the sole AI platform, and use of convenience sampling, which may limit generalizability. Nonetheless, the results suggest that blended

feedback strategies could be adopted more widely in similar educational contexts, provided future research examines their effectiveness across diverse settings and technologies. Combining AI efficiency with teacher mediation, as theorized by Vygotsky (1978) and recent technology-enhanced feedback models (Shute, 2008; Wang & Li, 2020), not only improves writing proficiency but also fosters greater learner engagement and autonomy, offering a model for leveraging technology in culturally responsive ways to support EFL writing development.

Conclusion and Implications

This study demonstrates that integrating AI-driven teacher feedback, specifically through Grammarly, can substantially enhance the writing proficiency of Moroccan EFL learners. Combining the efficiency and immediacy of AI-generated suggestions with teachers' contextual and pedagogical expertise led to significant improvements in both surface-level (grammar, vocabulary) and higher-order (organization, coherence) aspects of student writing. These gains were sustained over time, as evidenced by the delayed posttest results, underscoring the lasting impact of blended feedback approaches.

The results have significant implications for language teaching and educational policy. For educators, adopting AI-powered platforms can streamline feedback and provide more timely, individualized, and actionable support for students. However, the teacher's role remains essential; AI-generated feedback should be interpreted, adapted, and personalized to address learners' unique needs and cultural backgrounds. Professional development should prepare teachers to integrate AI feedback tools effectively, ensuring that technology supports rather than replaces human expertise.

At the policy level, these findings support increased investment in digital infrastructure and reliable AI platforms within educational institutions. Decision-makers should establish guidelines and resources to promote ethical and effective AI use in classrooms, protect data privacy, and ensure equitable access for all learners.

While this research has addressed a notable gap by investigating AI-driven teacher feedback in the Moroccan context, it also underscores several critical directions for future inquiry. Specifically, research should prioritize rigorous experimental designs that directly compare blended AI and teacher feedback with feedback delivered solely by AI or by teachers, thereby isolating and quantifying the unique contributions of each approach. Future studies should also systematically explore the applicability of blended feedback across diverse learner populations by examining variables such as age, proficiency level, and institutional context to establish broader generalizability. Comparative analyses of various AI feedback platforms are needed to identify platform-specific features that most effectively support sustained writing development.

Additionally, longitudinal research must track the influence of AI-supported feedback on learner autonomy, motivation, and critical thinking over extended periods to assess enduring impacts. Finally, a comprehensive and systematic examination of how AI-driven feedback interacts with teacher mediation and sociocultural dynamics in multiple educational contexts is necessary to generate robust, evidence-based recommendations for integrating technology into EFL writing instruction.

Despite these contributions, several key limitations temper the broader applicability and interpretability of the study's findings. The investigation was conducted exclusively at ESEF Berrechid, which presents challenges for generalizing the results to other institutional contexts or geographic regions that may differ in resources, student demographics, or pedagogical practices (Baghit & Touhami, 2026). This single-site focus limits the extent to which the outcomes can be transferred to broader educational settings, particularly given the unique curricular structures and localized teacher training models that may exist elsewhere. In regions with different technological infrastructures or where English-language instruction follows alternative pedagogical norms, the intervention's effectiveness could vary significantly. Furthermore, relying solely on Grammarly as the AI feedback platform constrains the ability to determine whether similar outcomes would emerge with alternative platforms that may employ different algorithms or provide distinct forms of feedback. The convenience sampling approach, rather than true randomization, raises further concerns regarding selection bias and group equivalence, potentially influencing the observed effects. The relatively brief duration of the intervention also poses a limitation, as it restricts insights into the long-term sustainability of writing gains and the persistence of changes in student motivation or autonomy. Additionally, the study design does not account for potential moderating variables such as students' prior technology experience, teacher digital literacy, or institutional support, which may interact with the efficacy of AI-driven feedback. To address these issues, future research should strive to increase diversity across institutional contexts, incorporate multiple AI feedback systems, adopt randomized controlled designs to bolster internal validity, and extend intervention duration. Such efforts would enhance understanding of the broader impact and practical feasibility of blended AI and teacher feedback strategies in EFL instruction.

Above all, integrating AI-driven teacher feedback offers a promising pathway to enhancing writing instruction and learner outcomes in EFL contexts. By thoughtfully blending technological innovation with teacher expertise, educators can deliver more meaningful and impactful feedback that fosters greater student proficiency, confidence, and autonomy. However, future research should critically examine how various

configurations of AI and teacher feedback influence the development of higher-order writing skills, such as argumentation and critical analysis, across diverse student populations. Specifically, longitudinal studies could explore the long-term effects of blended feedback on learners' ability to transfer writing skills beyond academic contexts, thus providing a deeper understanding of how AI-supported instructional methods can be tailored to sustain writing development and critical thinking in global EFL environments.

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Chapter 15: Globalization and Per Capita Income in Africa: Revealing Inequalities and Aligning Development with the SDG Framework

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Abstract
This study investigates how globalization affects per capita income in a few chosen African nations and how it relates to sustainable development. This article examines the impact of globalization on per capita income across selected African countries. It highlights existing disparities and proposes strategies to align economic development with the United Nations Sustainable Development Goals (SDGs). Using a mixed-method approach, the study combines comparative and exploratory qualitative analysis based on policy papers, World Bank reports, and country case studies of South Africa, Kenya, and Nigeria with regression analysis of secondary economic data. Trade openness, foreign direct investment (FDI), and technology adoption were analyzed in relation to per capita income using data from 2010 to 2022. The selected countries represent varying levels of integration into global markets. Globalization indices and per capita income growth were positively and statistically significantly correlated, according to regression results ($p < 0.05$). The findings indicate that globalization enhances income levels in countries with strong institutions, advanced digital infrastructure, and diversified economies. In contrast, countries with weak governance and inadequate infrastructure, such as Zimbabwe and Chad, derive limited benefits. The study also identifies increasing socioeconomic disparities between urban and rural areas, driven by unequal access to global markets and digital resources. Technological innovation plays a crucial mediating role by improving financial access, particularly through mobile banking in underserved regions. The study concludes that globalization must be supported by effective policy frameworks that promote inclusive growth, digital transformation, and institutional reform. Strategic investment in infrastructure and transparent governance is essential. Aligning globalization with SDG 1, SDG 8, SDG 9, and SDG 10 can enhance equitable and sustainable economic development in Africa.

Keywords: Per capita income, Africa, Globalization, Sustainable Development Goals, Digital Infrastructure, Income Inequality

Introduction

Increased trade, investments coming in, and new technology are all signs of globalization. It has become a major driver of economic growth. It lets countries take advantage of overseas markets, trade ideas, and get money from outside. But it has had a random effect on Africa. Countries like South Africa, Nigeria, and Kenya have had better access to markets, technology, and investment. However, this has not been the case for other countries like Mali and Madagascar, which have continued to be left out and have seen wealth gaps grow (Guzel et al., 2021). These kinds of differences raise crucial considerations about how globalization affects local economies and institutions. Per capita income is an important number that can help us understand how globalization has affected Africa, as the continent's economy is so different. It is important to understand this relationship so that it does not lead to more inequality but instead to progress that includes everyone.

This article looks at how globalization has affected Africa's per capita income and how successfully those effects have met the demands of the United Nations' Sustainable Development Goals (SDGs). We are looking into SDG 1 (No Poverty), SDG 8 (Decent Work), and SDG 10 (Reduced Inequalities). It uses regression methods and comparisons to undertake an empirical study based on secondary data.

The paper makes a unique contribution by doing a region-specific, comparative analysis that uses both quantitative and qualitative data. The paper gives real-world proof to the talks about continuity and lays out possible ways to make sure that globalization has fair and long-lasting effects on development, using the different effects of globalization on African countries as an example.

1.1 Background

Africa is at a pivotal developmental juncture, bolstered by its vast natural resources, swiftly growing population, and burgeoning consumer markets. The changing global economic landscape and rapid technology advancements need a reassessment of Africa's position in world markets. The integration of Africa into the global economy remains inconsistent across the continent. Countries such as South Africa, Nigeria, Kenya, and Egypt have leveraged globalization to secure investments, establish export markets, and enhance infrastructure. Nonetheless, sub-Saharan and landlocked nations are at risk of falling behind due to inadequate institutional frameworks, deficient basic infrastructure, limited capacity to adopt new technologies, and persistent dependence on essential commodities.

The inconsistent trend of globalization in Africa raises significant concerns about equitable economic development. The limited benefactors of globalization appear to be three groups: multinational corporations, urban elites, and certain economic sectors, while rural-urban centers, informal economies, and the impoverished remain excluded. External global economic variables, such as price volatility, external debt, and trade imbalances, exacerbate the vulnerabilities of nations with fragile economies (Asongu & Odhiambo, 2023). The globalized world has dismantled traditional livelihoods, resulting in widening income disparities and environmental degradation in several African regions. Investigating the impact of globalization on African per capita income necessitates a thorough examination that considers regional variation, development objectives, and institutional frameworks across the continent.

1.2 Research Objectives

The research follows three essential goals to analyze the complete effect of globalization on African economies. The first research objective examines the relationship between globalization indicators consisting of trade openness, FDI inflows, technological penetration, and per capita income across various African economies. The study project generates several methods to measure, over several periods, the benefits on income and quality of life. The study acknowledges individual impacts and tries to find which elements lead to different globalization results across different African countries. The assessment aims to study how good results of globalization are affected by governance systems, infrastructure development, educational achievements, and political stability, together with institutional operating capacity.

The purpose set strategic strategies that improve positive SDG targets for globalization using practical study coupled with theoretical studies (Uleanya & Yassim, 2024). The proposed economic plans will combine inclusive approaches with human resource development and local partnership strategies to achieve sustainable, equitable growth as a result of globalization for the African continent.

1.3 Research Questions

The research will use these questions to direct its process while addressing the established objectives:

4 Which aspects of globalization affect per capita income in different African countries? The research analyzes the basic link between globalization and per capita income growth while exploring different socioeconomic and geopolitical conditions within nations (Relevant to SDGs 1 and 8).

5 What determines whether the positive or negative effects occur when countries embrace globalization? The investigation examines structural and institutional, along with policy variables that define different outcomes from globalization, looking at local context intricacies (Aligned with SDG 10).

6 What strategic approaches do African countries need to develop regarding globalization for SDG alignment? Strategic aspects of globalization need evaluation to establish strategic alignments between its operating methods and long-term development plans while broadening its benefits across every demographic segment (Related to SDGs 1, 8, and 10).

1.4 Significance of the Study

The study provides vital data relevant to different groups, including legislators, development professionals, academic scholars, and international organizations aiming at forwarding Africa's sustainable development projects. The research provides important results on how globalization shapes African national economic changes and influences income welfare in various local environments, providing a necessary basis for evidence-based policy development. The results of the search provide governments and regional bodies with a reference model that supports policy development compatible with local conditions and global development goals like the SDGs (Uleanya & Yassim, 2024). Strategies that embrace international economic systems with inclusive practices that fit individual structural conditions of every country are what African countries need. The methods of research point to solutions fit for the financial situation of different African countries.

The study improves current scholarly discussions by challenging the general belief that globalization brings the same benefits to underdeveloped countries. The study exposes oversimplified economic models since it assesses the intricate economic reality of African countries. The good impact of globalization on per capita income functions differently between countries with functional institutions and infrastructure and those experiencing political unrest and governance issues. Different spatiotemporal results provide a perfect research environment for both empirical and theoretical studies, which should first focus on political economy and development economics together with international relations. Combining studies of globalization with sustainable development analysis through an examination of SDG 1 (No Poverty), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 10 (Reduced Inequalities) helps the study to close gaps in present academic literature. This method improves academic worth as well as useful application (Abdulhamid, 2020).

2. Literature Review

2.1 Sustainable Development Goals (SDGs) and Globalization in Africa

The SDGs provide a framework for fair global development, while the effects of globalization on Africa are contingent upon specific contexts. Despite Asongu and Odhiambo's (2023) claim that inclusive finance and digital infrastructure can convert globalization into a catalyst for development, they warn that this is contingent upon the functionality of governance systems. Inclusive financial institutions advance SDGs 1, 8, and 10 by enhancing gender access and income equality, as evidenced by their comparative examination of sub-Saharan Africa and Armenia. The research by Guzel et al. (2021) reaffirms the importance of SDG 16 (Peace, Justice, and Strong Institutions), indicating that globalization can only improve life expectancy and welfare through the support of strong institutions. Kedir et al. (2017) underscore the imperative of targeted development finance to rectify the infrastructural and innovation deficiencies that underpin SDG 9.

These studies are predominantly hopeful; yet, they often overlook the different institutional capacities of African governments. The belief that globalization universally promotes the SDGs is erroneous; its advantages will be confined to the elite and urban areas unless governance and policy coordination are modified to be more flexible.

2.2. The Influence of Globalization on Economic Expansion and Disparity

Intricate and fragmented is the link that exists between the economic growth of Africa and globalization. According to Sustainable Development Goals 8 and 9, countries that have reached a mature financial state and institutions that are stable, such as South Africa and Nigeria, have been successful in attracting foreign direct investment and expanding trade (Akanle et al., 2022). On the other hand, these advantages are usually concentrated in industries that call for a substantial amount of capital investment. Amodu (2020) is critical of this model since he emphasizes that an excessive reliance on commodities such as oil makes economies vulnerable to global disruptions, which in turn undermines the increase in income over the long term. This is especially true in situations where diversification initiatives are delayed compared to other scenarios.

Analysis of economic inequality exposes a basic contradiction: globalization has the capacity to raise GDP while also growing income disparities. This contradiction is revealed when economic and inequality analyses are integrated. This is made abundantly obvious by the urban-rural divide, which is characterized by the fact that

metropolitan elites enjoy the benefits offered while rural communities are excluded. It has been demonstrated by Burns (2018) and Amodu (2020) that informal labor and small-scale producers are disproportionately disadvantaged by global trade flows and automation. It has been suggested by Juju et al. (2020) that inclusive mechanisms, such as mobile banking and cooperative finance, could be utilized in order to remedy this imbalance. On the other hand, their effectiveness is diminishing due to the lack of suitable digital infrastructure and poor investment in rural areas.

Consequently, globalization may provide the impression that it is a catalyst for progress; yet, the distribution of its effects is extremely unequal, which exacerbates the structural disparities that were already present. Numerous studies fail to analyze the reasons why these reforms are not implemented in low-governance situations, despite the fact that the literature makes a strong case for integrated development methods.

2.3 Mediating the Effects of Globalization Using Government and Institutions

The strength of the government and the reliability of its institutions determine the extent to which globalization affects Africa. Mahlatsi (2021) makes it clear that well-planned institutions help achieve continuing financial expansion goals and shield economies from big shocks. But Africa can't benefit from globalization because of critical governance shortcomings.

The benefits of globalization benefit the wealthy at the expense of the vulnerable, according to research by Mwesigye and Muhangi (2015). This is especially true in situations where there is corruption, lax legislation, and unpredictable rules. Since SDG 16 (Peace, Justice and Strong Institutions) contributes to the attainment of sustainable development, this action jeopardizes its progress. Furthermore, pollution and unfair labor practices are common outcomes of globalization due to the lack of control and regulation over international financial transactions and movements (Hafiz & Sabrina, 2023).

SDG 17 (Partnerships for the Goals) is supported by AfCFTA, which aims to facilitate cooperation and integration among African nations. According to research by Amodu (2020), regional pacts improve the bargaining power of small economies and protect them from fluctuations in global markets. Investors should rest easier knowing that the likelihood of certain legal outcomes will be lower if African laws are more uniform.

African governments will be better able to control the effects of globalization on them once they implement the recommendations made by Mwesigye and Muhangi (2015)

and strengthen their institutions with anti-corruption agencies, transparent financial oversight, and independent central banks. To include globalization in development plans that guarantee individuals' safety and prosperity collectively, such abilities are essential.

2.4. African Technological Developments and Globalization

The implications of technology on globalization are complex and contradictory. In circumstances of unequal access, digital innovation can intensify preexisting disparities. This is particularly accurate following the provision of resources that enhance inclusivity. Ndung'u (2017) asserts that the M-Pesa service has directly contributed to Sustainable Development Goals 4, 8, and 9 by enhancing rural populations' access to financial services and generating income in Kenya. Although Ribeiro-Duthie (2019) concurs with this viewpoint, he observes that the advantages predominantly concentrate in areas with a high level of technological expertise and contemporary infrastructure.

Matevosyan et al. (2023) assert that innovation alone is insufficient; it requires reinforcement through strategic finance and institutional legitimacy for successful implementation. Despite the presence of some positive instances, digital inequality persists within communities differentiated by gender, geography, and socioeconomic status. Consequently, numerous towns are increasingly lagging. The political and economic access mechanisms are inadequately examined by these inquiries, although generating significant interest in technological potential. African states should create digital policies aligned with inclusive economic planning to maximize the advantages offered by technology in this era of globalization. The startups possess the capacity for transformation into digital solutions.

3. Methodological Research Tools

A mixed-methods approach was utilized to investigate the correlation between globalization and per capita income. Because it allowed for the integration of quantitative statistical analysis with qualitative contextual interpretation, a mixed-methods research design was chosen to provide a more thorough knowledge of the research problem. The quantitative research employed a multiple linear regression model, utilizing data from the World Bank and African Development Bank (2010–2022) for 20 African countries. In order to encompass current trends in globalization, technological innovation, foreign direct investment, and sustainable development initiatives throughout African nations, the years 2010 to 2022 were chosen. Essential determinants encompassed trade openness, foreign direct investment inflows, technological adoption, and governance quality. The chosen nations allowed

for comparative research across various African contexts since they represented varying degrees of institutional quality, economic development, and integration into the global economy. The regression equation was delineated as:

The utilized regression equation is,

$$PCI = \beta 0 + \beta 1(TradeOpen) + \beta 2(FDI) + \beta 3(TechAccess)\beta 4(GovQuality) + \varepsilon$$

African per capita income is affected by four globalization factors in the regression model. There is a minor positive link ($p < 0.10$) between trade integration and income growth, although it depends on supplementary metrics. A significant positive association ($p < 0.01$) exists between FDI as a percentage of GDP and increasing productivity and employment. Digitization and mobile penetration considerably enhance financial access and efficiency ($p < 0.05$). Better governments restrain globalization, while better institutions maximize its benefits. The adjusted R^2 of 0.64 suggests these factors explain 64% of PCI variation, while ε represents unobserved effects. This shows how institutional strength and targeted investments might optimize globalization's income gains in different African contexts. Multiple linear regression approaches were used to assess quantitative data and find statistical correlations between per capita income levels and globalization indices.

Qualitative analysis was enhanced by case studies of South Africa, Kenya, and Nigeria, chosen for their economic diversity and varying levels of exposure to globalization. Semi-structured interviews with 15 officials, scholars, and industry experts yielded contextual insights on the institutional and structural elements affecting outcomes. Purposive sampling was used to choose participants based on their professional experience and knowledge of globalization and African economic development. To detect recurrent institutional, technological, and governance-related issues affecting economic outcomes, qualitative data were subjected to a thematic analysis.

Secondary data was gathered from globally renowned databases, such as the World Bank and African Development Bank, to increase validity and dependability. Additionally, to guarantee consistency and bolster the study's reliability, qualitative and quantitative outcomes were compared.

4. Results and Interpretive Analysis

Although certain African governments benefited from globalization, the research shows that these possibilities did not evenly reach all areas of the continent. Kenya and South Africa benefit from globalization since their institutional strength follows a favorable political system, together with improved commercial channels. These elements helped them to enter the world economy and attract FDI, therefore enhancing

their position in international value chains and hence increasing per capita income. Trade involvement has greatly increased Kenyan agricultural product exports as well as South African industries, therefore generating improved economic possibilities in particular sectors.

Although the advantages of globalization are there, they are distributed very slowly to the whole population. Lack of political stability and inadequate government, along with underdeveloped infrastructure systems, have prevented nations like Zimbabwe and Chad from attaining economic growth. Political upheaval, along with violence in these nations, has hampered economic growth and discouraged foreign capital investments, resulting in stagnation of worker pay levels. Inflation issues, combined with lawlessness and farmer deportations carried out under land redistribution projects, kept Zimbabwe from gaining from globalization. Despite its oil riches, Chad is hampered by economic diversification and population income growth since the nation has poor infrastructure, lacks basic electricity, and has continuous political instability (Ribeiro-Duthie 2019).

The results clearly illustrate the disparity in earnings between rural and urban individuals relative to their income levels. The economic growth rates in urban areas surpass those in rural regions. Technological advancement, coupled with global market access and substantial investment influx, disproportionately advantages urban areas over rural ones, hence exacerbating the economic disparity in the context of globalization. The rural population experiences inadequate progress despite their economic foundation being predominantly agricultural, and they face challenges in enhancing their infrastructure capacities. The disparity in development between urban and underdeveloped rural areas exacerbates the income divide within nations.

Countries that invest in human capital development via educational training have shown enhanced success in meeting globalization demands. M-Pesa and analogous mobile payment platforms have transformed the financial markets of Kenya and other nations by providing banking alternatives for previously unbanked populations (Ndung'u, 2017). Technological innovation has significantly altered income levels, especially in remote populations that lack conventional financial facilities. Mobile phones in Kenya illustrate that technical advancement facilitates financial inclusion and enhances service accessibility, ultimately leading to an increase in per capita income through platform adoption. The global economy's ability to let everyone participate has led to fewer occurrences of poverty and more economic options for many people.

Some African countries have effectively adapted technology, but many others are still having a hard time doing so. The digital divide is a big problem, even though the

internet is hard to get to, the digital infrastructure is bad, and teaching and learning about technology are hard. The problems make it hard for many African countries to fully participate in the global knowledge economy and/or take advantage of digital technologies. It is becoming evident now that there is a divide between those who can and cannot utilize technology. To make economic development more fair in countries with low levels of technology adoption, more people need to be able to use technology. This difference shows how important it is to put money into particular infrastructure, education, or digital skills to catch up with technology and make sure that everyone can enjoy the benefits of globalization in all areas of life.

The conclusions list the reasons why industrialization and innovation are important for long-term economic growth through diversity. Countries that don't rely on exporting raw materials as a major part of their economy can handle shocks from outside their borders. Nigeria's economy is unstable because it relies too much on oil exports, which leaves it vulnerable to swings in oil prices on the global market. Per capita income has not improved much (Uleanya & Yassim, 2024). Countries that diversify into other sectors, such as technology, services, and manufacturing, like Kenya and Ghana, have shown higher resilience to shocks from outside and stronger economic growth.

The report also talks about how the government plays a part in the results of globalization, along with the structural and technical aspects. Strong institutions have helped countries take advantage of the benefits that globalization has created and deal with its problems. These include good rule of law, open government, and smart economic strategies. On the contrary, countries with poor governance systems have battled to draw foreign capital, properly manage their resources, and guarantee fair sharing of wealth. Therefore, a major determinant of whether the advantages of globalization are distributed more fairly among many spheres of society is good government.

The research conclusions are based on the primary examination of secondary data acquired from the World Bank and the African Development Bank. Regression study indicates a statistically significant link between per capita income and three globalization measures: trade openness, FDI inflows, and technology access. The quality of governance is a significant moderating component that either enhances or diminishes the consequences of globalization.

The multiple regression model indicates that foreign direct investment ($p < 0.01$) and access to technology ($p < 0.05$) positively correlate with an increase in per capita income. Trade openness demonstrates less substantial yet still robust effects ($p < 0.10$), especially in countries with accommodating governance frameworks. An adjusted R^2 value of 0.64 indicates that the selected variables possess a strong explanatory capacity.

An overview of vital elements affecting per capita income in African nations, according to the study, is presented in this table through an analysis of governance quality combined with infrastructure delivery, alongside technological adoption and economic diversification. These factors will be organized into positive and negative sections through the table to summarize their effects on income levels.

Table 1: Factors Influencing Per Capita Income in Africa

Factor	Positive Impact	Negative Impact
Governance	strict rule of law, transparent policies	Corruption, weak institutions, and political instability
Infrastructure	Access to markets, trade routes, and improved logistics	Poor road networks, unreliable electricity
Technological Innovation	Financial inclusion, access to digital services	Digital divide, low adoption rates
Economic Diversification	Resilience to global shocks, sustainable growth	Dependence on primary exports, price volatility

Source: Developed by Author

Finally, the discussion indicates that globalization can really lead to an improvement in income levels through the medium of governance and technology. Nevertheless, inequalities exist, especially between the urban and rural populations. Globalization's success in Africa depends not only on external forces such as foreign direct investment and trade, but also on internal aspects such as the quality of institutions and investment in digital accessibility.

5. Conclusion

Globalization has the potential to augment per capita income in African nations; nevertheless, its effects are markedly disparate. The study found that governments with robust institutions, efficient governance, an inclusive digital infrastructure, and varied economies are more favorably situated to capitalize on global economic integration. Countries undergoing political turmoil, deficient regulatory frameworks, and limited access to technology continue to derive few or even detrimental benefits from globalization. The increasing divide between urban and rural people demonstrates how existing injustices are intensified by an exclusive emphasis on globalization without the implementation of complementary policies. Case studies from Kenya, South Africa, and Nigeria demonstrate that policy interventions specifically designed to

enhance access to technologies and institutional capacities for globalization can substantially augment the advantages of globalization.

The findings underscore the necessity for African countries to prioritize globalization strategies and contemplate the enhancement of sustainable development practices. This entails distributing sufficient resources nationwide to enhance rural infrastructure, digital literacy, and responsible governmental institutions. Governments must prioritize institutional reform, encourage economic variety, and establish inclusive technical systems that facilitate comprehensive domestic technological advancement. When properly executed, these tactics can convert globalization into a catalyst for equality instead of the inequality it has historically perpetuated on the continent.

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Chapter 16: Role of Digitalization in Improving Access to Personalized Nutrition in India

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Abstract

India is currently facing a complex nutritional landscape, where undernutrition coexists with a rising burden of obesity and lifestyle-related diseases. In such a scenario, generalized dietary guidelines are often insufficient to meet individual health needs. Personalized nutrition, which focuses on tailoring dietary recommendations to individual characteristics, has emerged as a promising approach. With the rapid expansion of digital technologies such as mobile health applications, tele-nutrition services, wearable devices and artificial intelligence there is growing potential to make personalized nutrition more accessible and effective.

This chapter explores how digitalization is influencing access to personalized nutrition in the Indian context. It highlights the ways in which digital platforms enable real-time dietary monitoring, behavior tracking and customized nutrition advice, particularly among urban populations. At the same time, it critically examines the challenges faced in rural and underserved areas, including issues related to digital literacy, infrastructure, affordability and data privacy. Using a conceptual approach supported by secondary data from National and International sources, this chapter aims to provide a balanced understanding of both the opportunities and limitations of digital nutrition solutions. It further discusses the need for inclusive and context-sensitive strategies to ensure that the benefits of digital health innovations reach all sections of society. The chapter concludes that while digitalization holds significant promise in advancing personalized nutrition in India, its success will depend on equitable access and thoughtful implementation.

Keywords: Digitalization, Personalized Nutrition, Dietary Behavior Tracking, Health Equity

Introduction

Nutrition plays an important role in maintaining health and preventing diseases, especially in a country like India where food habits are strongly connected with culture and traditions. However, India is currently facing both undernutrition and overnutrition. Many people in India still suffer from undernutrition, anemia and vitamin deficiencies, while urbanization and sedentary lifestyles have increased obesity, diabetes and heart diseases.

For many years, public health initiatives relied on broad, "one-size-fits-all" dietary guidelines. While these are helpful for general populations, they may not be suitable for every individual. Factors like metabolism, pre-existing medical conditions, activity levels and personal habits are different for each individual, which means a diet that works for one might be ineffective for another.

Because of these limitations, the concept of personalized nutrition has gained importance in recent years. Personalized nutrition focuses on providing dietary advice as per person's age, gender, lifestyle and health condition. The goal is to provide diet plans that are easier to maintain long term. The development of personalized nutrition services is being strongly supported by digital technologies. The increase in the use of smartphones and affordable internet, digital health tools have become part of the daily routine for many. Many people use apps to track everything from calorie intake and physical activity to sleep cycles and blood glucose levels through their digital health tools and applications.

This shift toward digitalization has fundamentally changed how nutrition care is delivered: **Increased Accessibility:** In the past, consulting a qualified nutritionist usually required visiting a city clinic or a major hospital. Now, tele-nutrition platforms allow people to get expert advice from their own homes.

Data-Driven Insights: Tools like AI, wearable fitness trackers, and cloud-based monitoring have made it possible to offer highly accurate, data-backed dietary recommendations.

However, these technological advances come with their own set of hurdles. The "digital divide" remains a major issue; many people in rural or low-income areas still lack reliable internet, digital literacy, or the financial means to access these services. Furthermore, as we collect more personal health data, concerns regarding privacy and data security have become increasingly urgent.

This chapter explores how digitalization is reshaping access to personalized nutrition in India. It looks at the influence of emerging health technologies, their benefits for individual care, and the practical challenges that must be overcome. Ultimately, it emphasizes the need for an ethical and inclusive approach to ensure that the benefits of digital nutrition reach every segment of society, regardless of their location or economic status.

Understanding Personalized Nutrition

When creating nutritional recommendations, personalized nutrition takes into account each person's particular traits. Conventional dietary guidelines often offer overall population recommendations. Personalized nutrition, on the other hand, emphasizes the individual. The idea is predicated on the knowledge that individuals react to food in different ways. Nutritional demands are influenced by a number of factors, including heredity, metabolism, age, physical activity, cultural customs, food choices, health issues and socioeconomic situation.

For instance, due to differences in activity level, medical history, or metabolic rate, two people with the same body weight may have differing dietary needs. In a similar vein, dietary guidelines for people with diabetes will be different from those for people with kidney disease or obesity.

Personalized nutrition generally includes:

- Assessment of dietary habits
- Monitoring of lifestyle and physical activity
- Evaluation of health conditions
- Customized meal planning
- Continuous feedback and behavior modification
- Goal-oriented nutrition interventions

The growing burden of lifestyle diseases has increased the importance of personalized nutrition. Conditions such as obesity, type 2 diabetes, hypertension and cardiovascular diseases require long-term dietary management. Generic advice often fails because it may not suit individual routines and preferences. Personalized approaches improve adherence because they are more practical and relatable. Another important aspect of personalized nutrition is behavior change. Nutrition counseling is not only about prescribing diets. It also involves motivating individuals to adopt healthier habits. Digital tools now help in tracking behavior patterns and encouraging consistency through reminders, notifications and progress monitoring. Personalized nutrition is gradually becoming more popular in India among urban populations, fitness fanatics, and health-conscious people. However, due to disparities in technology and economic status, access is still unequal.

India's Healthcare and Digitalization

The use of digital technologies to enhance systems, services and communication is called Digitalization. Digitalization has completely changed how health information is used, shared and kept in the healthcare industry. Over the past ten years, India has experienced substantial digital growth. The growth of digital healthcare services has been facilitated by the proliferation of smartphones, reasonably priced internet access and government-led digital initiatives.

Several developments have supported digital health growth in India:
1.Expansion of telemedicine services
2.Increased use of mobile health applications
3.Digital health records
4.Growth of wearable health devices
5.Artificial intelligence-based health platforms
6.Online health consultation services
The COVID-19 pandemic further accelerated the adoption of digital healthcare. Teleconsultations become a useful option for many medical professionals and patients during lockdowns and movement restrictions. Online consultations, virtual counseling, and app-based nutrition monitoring have become convenient among dietitians and nutritionists.
Professionals and patients now have greater convenience because of digital healthcare. People may communicate with medical professionals from distant locations without having to make long trips. In India healthcare facilities are not equally available between urban and rural areas, this is extremely useful.
Preventive healthcare is also supported by digitalization. People are adopting health applications usage majorly to track their wellness, exercise, sleep, and eating habits to maintain better health.
Better dietary tracking, tailored advice, ongoing involvement, and health education are all made possible by digitalization in the context of nutrition.

Role of Digitalization in Personalized Nutrition

The delivery and accessibility of nutrition services have been altered by digitalization. Nutrition support is now more adaptable, data-driven, and interactive thanks to technology.

Mobile Health Applications

One of the most popular digital tools for customized nutrition is mobile health applications. With the help of these apps, users can keep tabs on their food intake, track their caloric intake, log their water intake, and assess their nutrient intake.
Many nutrition applications also provide:

- Personalized meal suggestions
- Fitness tracking
- Weight management support
- Reminder systems
- Progress reports
- Educational content

These applications help users become more aware of their eating habits. Real-time feedback enables people to spot harmful trends and gradually improve. Mobile applications give nutritionists helpful information on dietary habits and client

compliance. Dietitians can more effectively check meal logs, evaluate nutrient consumption and offer tailored input. Applications for fitness and wellness have grown in popularity in India, especially among younger people and city dwellers. Digital platforms are widely used by people to manage lifestyle diseases, sports nutrition and weight.

Tele-Nutrition and Online Counseling

The provision of nutrition guidance via digital communication channels is known as tele-nutrition. It consists of online follow-ups, phone conversations, message services, and video consultations. For those who do not have access to local nutrition clinics, tele-nutrition has increased accessibility. Qualified nutritionists are accessible to patients from remote or rural locations without requiring them to travel great distances. For students and working professionals who might find it challenging to attend in-person sessions, online therapy also provides flexibility.

Benefits of tele-nutrition include:

- Reduced travel time and cost
- Increased convenience
- Continuous communication
- Improved follow-up practices
- Greater reach of nutrition services

The use of tele-nutrition became especially common during the COVID-19 pandemic. Many healthcare professionals realized that virtual consultations could still provide effective dietary guidance and patient support. However, tele-nutrition also depends on internet access, digital literacy and communication quality. Some individuals may face difficulty using digital platforms, especially elderly populations.

Wearable Devices and Real-Time Monitoring

Wearable devices such as fitness bands and smartwatches have become increasingly popular. These devices monitor physical activity, sleep duration, heart rate, energy expenditure, and other health indicators. The information collected through wearable devices helps individuals understand their lifestyle patterns more clearly. Nutrition professionals can also use this data to create more realistic and personalized dietary recommendations.

For example:

1. A physically active individual may require higher calorie intake.
2. Poor sleep patterns may influence appetite and eating behavior.
3. Sedentary behavior can contribute to obesity and metabolic disorders.
4. Real-time monitoring improves self-awareness and accountability. Many users feel motivated when they can track progress visually.

Wearable technology also supports preventive healthcare by helping individuals identify unhealthy patterns before severe health complications develop.

Artificial Intelligence and Data Analytics

Artificial intelligence is playing a growing role in personalized nutrition. AI systems can analyze large amounts of health-related data and generate individualized recommendations.

AI-based nutrition platforms may use:

a. Dietary records
b. Medical history
c. Activity levels
d. Body measurements
e. Blood parameters
f. Lifestyle information

Based on these factors, systems can suggest meal plans, calorie targets and health recommendations. Artificial intelligence can also improve efficiency by automating routine tasks such as meal calculations and dietary assessments. Some applications use chatbots and virtual assistants to answer nutrition-related questions. These features increase accessibility and provide immediate support. However, AI-based systems cannot fully replace professional judgment. Nutrition counseling often requires emotional understanding, cultural sensitivity and individualized communication that technology alone may not provide.

Digital Platforms for Chronic Disease Management

Lifestyle diseases require continuous dietary management. Digital platforms have become useful tools for individuals managing conditions such as diabetes, obesity, hypertension and cardiovascular diseases.

Patients can monitor:

- Blood sugar levels
- Blood pressure
- Physical activity
- Weight changes
- Dietary habits

Digital reminders encourage medication adherence, hydration, and meal timing. Many diabetes management applications now integrate dietary guidance with glucose monitoring systems. This helps patients understand how specific foods affect blood sugar responses. Such tools improve patient engagement and support long-term behavior change.

Benefits of Digitalization in Personalized Nutrition

Digitalization offers several advantages in improving nutrition care and accessibility.

Increased Accessibility

One of the major benefits of digital nutrition services is improved accessibility. Individuals living in remote or underserved areas can access nutrition guidance through

online platforms. This is especially important in India, where healthcare professionals are unevenly distributed across regions.

Convenience and Flexibility

Digital platforms allow individuals to receive nutrition support according to their schedules. Online consultations reduce travel time and waiting periods. Working professionals, students, and homemakers often prefer flexible consultation options.

Better Dietary Monitoring

Digital tools improve accuracy in dietary tracking. Food logs, reminders, and automated nutrient analysis help users monitor their intake more consistently. Continuous monitoring also helps nutrition professionals provide timely feedback.

Improved Patient Engagement

Interactive features such as notifications, reminders, progress charts, and rewards encourage user participation. Behavior change becomes easier when individuals remain actively involved in their health journey.

Data-Driven Recommendations

Digital systems collect and analyze health information more efficiently. This allows for more personalized and evidence-based recommendations. Nutrition interventions can be modified according to progress and changing health needs.

Preventive Healthcare Support

Digitalization encourages preventive healthcare by promoting awareness and early intervention.

Individuals can identify unhealthy behaviors before they lead to severe medical conditions.

Challenges and Limitations

Despite its advantages, digitalization in personalized nutrition also faces several challenges.

Digital Divide

Inequitable access to digital technology is one of the main issues. Many low-income and rural communities still lack:

- dependable internet access
- Digital gadgets or smartphones
- Technical expertise
- Availability of digital medical services

Because of this, people who live in cities and have stable incomes are more likely to benefit from digital nutrition solutions in comparison with rural populations.

Limited Digital Literacy

The capacity to properly use digital technologies is referred to as digital literacy. Many people, particularly the elderly, may find it difficult to use wearable technology, online consultations, or smartphone applications. This reduces the effectiveness of initiatives related to digital health.

Affordability Issues

Some digital apps are free, many advanced services need costly hardware maintenance or memberships. Some people may not be able to buy wearable technology, premium health applications, and continuous monitoring devices. Thus, access to individualized nutrition treatments is affected by economic differences among the population.

Data Privacy and Ethical Concerns

Platforms for digital nutrition collect all the private health data from the user.
The information that has been mostly shared by users:

1. Medical documents
2. Eating patterns
3. Physical activity statistics
4. Body dimensions
5. History of personal health

Poor protection of sensitive data may result in misuse and lead to privacy issues. There are also concerns regarding the ethical application of health data and artificial intelligence. User trust requires necessary data protections policies and regulations.

Lack of Regulation

Quality control issues have arisen as a result of the rapid growth of digital health platforms. Not every application related to nutrition provides information that is supported by science and evidence based. Unrealistic diets, unreliable supplements, or misleading health claims may be promoted by certain platforms. Weak regulations may negatively affect public health.

Human Interaction Limitations

Nutrition counseling involves emotional support, motivation, and interpersonal communication. Digital platforms may reduce the direct interaction between nutrition professionals and clients. Some individuals may prefer discussing health concerns during face-to-face consultations.

Personalized Nutrition and Health Equity

Health equity refers to fair access to healthcare services regardless of social, economic, or geographical background. Digitalization has the potential to improve healthcare access, but it can also increase disparities if not implemented carefully.
Urban populations generally have better access to:

- Internet services
- Smartphones
- Digital literacy
- Healthcare infrastructure

In contrast, many rural communities continue to experience limited access to healthcare resources. Women, elderly populations, low-income groups, and marginalized communities may also face barriers in accessing digital nutrition services.

Therefore, it is important to design digital nutrition strategies that are inclusive and culturally sensitive.
Efforts to improve equity may include:

- Expanding rural internet connectivity
- Providing affordable digital services
- Developing regional language applications
- Conducting digital literacy programs
- Strengthening community-based healthcare systems

Digitalization should complement traditional healthcare systems rather than replace them entirely.

Government Initiatives and Policy Support

The Indian government has introduced several digital health initiatives in recent years. Programs promoting digital healthcare infrastructure have encouraged wider adoption of telemedicine and digital health records.
The Ayushman Bharat Digital Mission is one example of efforts aimed at improving digital health integration.
Telemedicine guidelines introduced in India have also supported virtual healthcare consultations. Public health campaigns increasingly use digital platforms for awareness generation regarding nutrition, maternal health, and lifestyle diseases.
Government support is essential for:

- Expanding healthcare accessibility
- Improving digital infrastructure
- Promoting affordable technology
- Ensuring data security
- Supporting nutrition education

Collaboration between healthcare professionals, policymakers, technology developers and researchers is necessary to improve the quality and reach of digital nutrition services.

Future Scope of Digital Personalized Nutrition in India

The future of personalized nutrition in India is likely to be strongly connected with digital innovation. Several trends indicate growing opportunities in this field. Integration of Artificial Intelligence and Precision Nutrition. The ability of artificial intelligence to analyze lifestyle patterns, physiological reactions, and nutritional behavior may advance. Based on ongoing data analysis, future systems might offer highly customized dietary suggestions.
Expansion of Telehealth Services

Telehealth is expected to continue growing even after the pandemic. Online nutrition counseling may become a regular part of healthcare services, especially for follow-up consultations and chronic disease management.

Growth of Regional Language Platforms

Developing nutrition applications in regional languages can improve accessibility for wider populations. Language-friendly platforms can support individuals who are not comfortable using English-based applications.

Increased Use of Wearable Technologies

Wearable devices may become more affordable and widely available. Improved monitoring systems can support better lifestyle management and preventive healthcare.

Community-Based Digital Nutrition Programs

Combining digital tools with community healthcare programs can improve outreach in rural areas. Community health workers may help individuals use digital nutrition services effectively.

Stronger Data Protection Frameworks

As digital healthcare expands, stronger regulations regarding data privacy and ethical technology use will become increasingly important. Building trust among users will be essential for long-term adoption.

Recommendations

To improve the effectiveness and inclusiveness of digital personalized nutrition in India, several measures should be considered.

1. Improve digital infrastructure in rural and underserved areas.
2. Increase awareness regarding digital nutrition services.
3. Promote digital literacy programs for different age groups.
4. Develop affordable nutrition technologies.
5. Encourage evidence-based digital nutrition platforms.
6. Strengthen data privacy and cybersecurity measures.
7. Promote regional language accessibility.
8. Integrate nutrition services with existing public healthcare systems.
9. Encourage interdisciplinary collaboration between nutritionists, healthcare professionals, and technology experts.
10. More research should be conducted to understand the effectiveness of digital nutrition interventions in India.

Conclusion

In India, the field of customized nutrition has gained importance through digitalization. Access to personalized nutrition consultations has been improved by technologies like wearable technology, tele-nutrition services, mobile health apps, and artificial intelligence. These technologies have improved convenience, nutritional tracking, patient involvement and understanding of preventative healthcare. People can now easily access dietary advice and monitor their health in real time. Benefits are not available equally to all the individuals from digitalization. Accessibility and effectiveness are still impacted by challenges including the digital divide, cost, low digital literacy, data privacy, and lack of regulation.

Adopting inclusive and moral methods is crucial to ensuring that digital tailored nutrition improves public health. Cultural diversity, economic disparities, and differing degrees of technological access should all be taken into account when designing digital health solutions. In future, India has a great chance to grow its digital tailored nutrition services. Digitalization may play a significant role in enhancing nutrition results and encouraging healthier lifestyles across various populations with the ethical use of technology, better infrastructure and more knowledge.

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Chapter 17: Synthetic Culture: Generative AI and the Transformation of Social Media Expression

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Abstract

The rapid integration of generative artificial intelligence into social media platforms is transforming how online expression is produced, circulated, and interpreted. While public debate often focuses on concerns surrounding misinformation or automation, the cultural implications of AI-generated content extend beyond questions of accuracy alone. This chapter examines how generative AI is reshaping norms of authenticity, creativity, humour, and identity performance within contemporary digital culture. Rather than treating AI as either a purely disruptive threat or a neutral technological tool, the chapter adopts an analytical approach that situates synthetic content within the broader dynamics of platform-driven communication.The discussion explores how AI-assisted systems increasingly influence everyday forms of online expression, including captions, memes, influencer content, visual aesthetics, and interpersonal communication. Particular attention is given to the emergence of synthetic internet culture, the growing visibility of AI-generated influencers such as Lil Miquela, debates surrounding "AI slop" and low-quality synthetic content, and concerns regarding the homogenisation of digital language through recognisable "GPT-style" communication patterns. The chapter also examines how social media platforms are responding through content labelling policies, disclosure mechanisms, and moderation practices.Drawing upon examples from TikTok, Instagram, Facebook, LinkedIn, and AI companion platforms, the chapter argues that generative AI is not replacing human expression but altering the conditions under which authenticity and creativity are performed and recognised online. While AI tools expand opportunities for participation and content production, they also contribute to new forms of uncertainty regarding authorship, originality, and trust within digital environments. Ultimately, the chapter contends that synthetic media culture reflects broader tensions between automation, platform economies, and evolving social expectations surrounding communication in increasingly AI-mediated online spaces.

Keywords: Generative Artificial Intelligence. Social Media Culture. Digital Expression, Online Authenticity, Synthetic Media

1. Introduction

The rapid development of generative artificial intelligence (AI) has transformed contemporary digital communication in ways that increasingly blur distinctions between human expression and machine-generated content. Systems such as ChatGPT, Midjourney, DALL·E, Claude, and AI voice-generation tools are now integrated into everyday online practices across major social media platforms. Users employ generative AI to produce captions, memes, images, influencer content, comments, marketing campaigns, and conversational interactions at unprecedented scale and speed. As a result, social media environments are becoming increasingly populated by synthetic forms of communication that imitate, augment, and sometimes replace traditionally human modes of online expression.

The growing visibility of AI-generated content has intensified debates surrounding authenticity, creativity, trust, and identity within digital culture. Social media platforms have historically relied upon perceptions of personal expression and human participation as central features of online engagement. However, the emergence of AI-generated influencers, synthetic personalities, automated engagement systems, and machine-assisted communication increasingly destabilises assumptions regarding who or what is producing online content. Users now encounter digital environments where human-generated and machine-generated communication coexist in highly integrated and often indistinguishable forms.

These transformations are closely connected to the broader political economy of platform culture. As Van Dijck (2013) argues, social media platforms operate through systems of visibility, data extraction, and algorithmic amplification that shape how communication acquires social and economic value online. Generative AI aligns closely with these platform logics because it enables rapid content production optimised for engagement, visibility, and algorithmic circulation. AI-generated content therefore functions not merely as a technological novelty, but as a development deeply embedded within the commercial infrastructures of platform capitalism and attention economies.

Existing discussions surrounding generative AI frequently focus on technological innovation, misinformation, or ethical concerns relating to deepfakes and automated content production. While these issues remain important, comparatively less attention has been given to how generative AI reshapes broader cultural norms surrounding online identity, humour, creativity, and authenticity within everyday social media environments. This chapter addresses that gap by examining generative AI as a cultural phenomenon that transforms the conditions under which social media expression is produced, circulated, and interpreted.

The significance of this issue extends beyond isolated examples of AI-generated media. Social media increasingly functions as a primary space through which individuals construct identity, participate in public discourse, perform social belonging, and engage with digital culture. As generative AI becomes integrated into these communicative systems, it alters not only how content is produced, but also how authenticity itself is understood within online interaction. The increasing normalisation of synthetic media raises important questions regarding whether digital culture is moving toward forms of communication in which visibility, engagement, and emotional resonance become progressively detached from human presence or authorship.

This chapter adopts a qualitative and analytical approach grounded in digital culture studies, platform theory, and media sociology. Drawing upon contemporary case studies involving AI influencers, AI-generated meme cultures, synthetic engagement content, and platform governance responses, the analysis explores how generative AI reshapes online expression across social media ecosystems. Particular attention is given to the relationship between synthetic media and platform economies, the emergence of hybrid human-machine communication practices, changing perceptions of authenticity, and the governance challenges associated with increasingly AI-mediated digital environments.

The chapter argues that generative AI should not be understood simply as a tool for content creation, but as a structural transformation in how online communication operates within platform societies. While synthetic media may expand forms of creativity and participation, it also intensifies concerns relating to authenticity, algorithmic visibility, digital trust, and the commodification of communication. The rise of AI-assisted expression therefore reflects broader shifts in digital culture in which human communication increasingly becomes entangled with automated systems designed to optimise visibility, engagement, and platform participation.

2. Methodology

This chapter adopts a qualitative and analytical approach to examine how generative artificial intelligence is reshaping contemporary social media culture. Rather than treating AI-generated content primarily as a technical innovation, the chapter approaches generative AI as a cultural and communicative phenomenon embedded within broader platform economies, digital identity practices, and systems of algorithmic visibility. The analysis is situated within interdisciplinary scholarship relating to digital culture, platform studies, media sociology, and communication theory.

The chapter employs interpretive digital culture analysis to examine how synthetic media systems influence norms of online expression, authenticity, humour, and identity

performance across social media environments. Particular attention is given to how generative AI participates in everyday forms of digital communication rather than existing solely within specialised technological contexts. The study therefore focuses on the cultural meanings, communicative patterns, and platform dynamics associated with AI-assisted expression.

The analysis draws upon a range of contemporary case studies and publicly visible digital phenomena across platforms including TikTok, Instagram, Facebook, LinkedIn, YouTube, and AI-interaction platforms such as Character.AI and Replika. These examples include AI-generated influencers such as Lil Miquela, debates surrounding "GPT-style" communication on LinkedIn, the proliferation of "AI slop" imagery on Facebook engagement pages, AI-generated meme cultures, synthetic voiceovers on TikTok, and evolving platform disclosure policies relating to AI-generated content. These case studies were selected because they illustrate recurring tensions surrounding authenticity, visibility, creativity, and trust within AI-mediated online environments.

The chapter also incorporates analysis of platform governance frameworks and institutional responses relating to synthetic media. Public policy statements and disclosure initiatives from companies such as Meta, TikTok, and YouTube are examined alongside broader discussions concerning AI transparency, platform accountability, and digital literacy. In addition, theoretical perspectives from platform studies, digital labour scholarship, and media theory are used to contextualise the relationship between generative AI and the commercial logics of social media ecosystems.

The methodology does not seek to produce statistically generalisable findings regarding all forms of AI-generated communication. Social media cultures vary significantly across platforms, linguistic communities, regional contexts, and user demographics. Instead, the chapter aims to provide a critical and interpretive understanding of broader cultural transformations emerging through the increasing integration of generative AI into online communication systems. The focus therefore remains analytical rather than predictive or experimental.

Several limitations should also be acknowledged. First, generative AI technologies and platform policies continue to evolve rapidly, meaning that communicative trends and governance practices discussed in this chapter may change over time. Second, the analysis relies primarily on publicly accessible digital content, media discourse, and platform documentation rather than ethnographic interviews or large-scale quantitative datasets. Third, because much public debate surrounding generative AI remains concentrated within English-language and platform-centric online environments, certain regional or non-English experiences of synthetic media may be underrepresented.

Despite these limitations, the qualitative analytical approach adopted in this chapter is appropriate for examining a rapidly evolving cultural phenomenon characterised by conceptual ambiguity, technological experimentation, and shifting forms of digital participation. By combining theoretical analysis with contemporary case studies drawn from platform culture, the chapter seeks to contribute to broader discussions regarding how generative AI is transforming the social and cultural conditions under which communication, identity, and creativity operate within increasingly AI-mediated digital environments.

3. Synthetic Expression and Platform Culture

Generative artificial intelligence is increasingly transforming the cultural logic of social media platforms by altering how online expression is produced, circulated, and valued within digital environments. Social media has historically functioned through systems of visibility in which communication acquires significance through engagement metrics, algorithmic amplification, and continuous content circulation. As Van Dijck (2013) argues, platform ecosystems are structured through technological architectures that incentivise participation, visibility, and data extraction simultaneously. Generative AI aligns closely with these systems because it enables rapid and scalable forms of content production optimised for algorithmic distribution.

The integration of AI-generated content into platform culture reflects broader transformations within digital communication economies. Social media platforms increasingly reward speed, frequency, and engagement rather than sustained forms of originality or interpersonal authenticity. Generative AI systems are particularly effective within such environments because they can produce high volumes of visually appealing, emotionally resonant, or trend-responsive content with minimal human effort. Synthetic media therefore functions not merely as technological assistance but as an extension of platform logics that prioritise visibility and continuous circulation.

One significant consequence of this transformation is the emergence of hybrid forms of communication in which distinctions between human-generated and machine-generated expression become increasingly unstable. AI-assisted captions, automated comment generation, synthetic voiceovers, and AI-generated visual aesthetics now appear routinely across platforms such as TikTok, Instagram, Facebook, and LinkedIn. In many cases, users knowingly interact with machine-assisted content without necessarily treating it as deceptive. Instead, synthetic communication increasingly becomes normalised as part of everyday platform participation.

This shift is particularly visible in the growing popularity of AI-generated influencers and virtual personalities. Figures such as Lil Miquela demonstrate how synthetic identities can accumulate visibility, brand partnerships, and emotional engagement despite lacking human embodiment. These digital personas function through carefully

constructed performances of relatability and authenticity that imitate influencer culture while simultaneously exposing its performative foundations. As Marwick (2015) notes, visibility within platform economies frequently depends upon the strategic performance of intimacy and personal identity. AI-generated influencers intensify this dynamic by revealing how online authenticity can operate as an aesthetic effect rather than a guarantee of human presence.

At the same time, generative AI contributes to the increasing automation of digital creativity itself. Meme production, once strongly associated with participatory remix culture and collective online humour, is becoming increasingly shaped by AI-generated imagery and text synthesis. AI-generated memes circulate rapidly across social platforms because they can reproduce recognisable aesthetic patterns, humour formats, and emotional cues with extraordinary speed. However, this automation also raises questions regarding originality and cultural participation. The increasing abundance of synthetic content may contribute to forms of communicative saturation in which online spaces become overwhelmed by repetitive, engagement-optimised material designed primarily for algorithmic circulation rather than meaningful social interaction.

The phenomenon commonly described online as "AI slop" illustrates this concern particularly clearly. Facebook engagement pages, low-quality image accounts, and AI-generated content farms increasingly distribute emotionally manipulative or visually exaggerated synthetic images designed to maximise clicks and reactions. Such content often combines sentimentality, absurdity, and visual hyperrealism in ways optimised for algorithmic engagement. The proliferation of these materials demonstrates how generative AI can intensify existing platform incentives favouring virality and attention extraction over informational quality or communicative authenticity.

Importantly, synthetic media does not simply replace human communication but reshapes expectations surrounding online participation itself. Increasingly, users adapt their communication styles in response to AI-mediated environments. On platforms such as LinkedIn, for example, many users now identify highly polished or formulaic posts as "GPT-style" writing, reflecting growing awareness of machine-assisted communication patterns. AI-generated linguistic styles are therefore beginning to influence how authenticity and credibility are interpreted within digital culture.

These developments also raise broader questions regarding trust within online environments. Social media platforms have historically struggled with misinformation, bot activity, and manipulated engagement systems. Generative AI intensifies these concerns because synthetic media can imitate emotional tone, visual realism, and conversational interaction with increasing sophistication. As Crawford (2021) argues, artificial intelligence systems operate within broader infrastructures of data extraction

and computational optimisation shaped by commercial interests rather than neutral technological progress. The expansion of AI-generated communication therefore reflects not only technological innovation but also deeper structural transformations in how digital platforms organise attention, visibility, and participation.

At the same time, generative AI should not be understood solely through frameworks of decline or inauthenticity. Synthetic media may also expand forms of creativity and experimentation within digital culture. Users employ AI systems for parody, collaborative artistic production, satire, and participatory remix practices that continue traditions of internet humour and digital creativity identified by Jenkins (2006) within convergence culture. AI-assisted communication can therefore function simultaneously as creative augmentation and as algorithmically optimised automation depending upon platform context and patterns of use.

Ultimately, the rise of synthetic expression reflects a broader transformation in the relationship between communication and platform infrastructures. Generative AI increasingly enables communication to become detached from direct human effort while remaining highly effective within systems organised around visibility and engagement. Social media culture is therefore entering a period in which authenticity, creativity, and participation are progressively negotiated within environments where human and machine-generated forms of expression coexist in increasingly integrated ways.

4. Authenticity, Identity, and AI-Mediated Influence

Authenticity has long functioned as a central value within social media culture. Platforms such as Instagram, TikTok, YouTube, and LinkedIn reward performances of relatability, intimacy, and personal identity that encourage users to perceive online communication as socially genuine even within highly curated environments. Influencer culture in particular depends heavily upon what Abidin (2018) describes as calibrated authenticity, in which online personalities strategically present aspects of everyday life in ways designed to appear spontaneous and emotionally accessible while simultaneously maintaining visibility and commercial value. The emergence of generative artificial intelligence complicates these dynamics by increasingly separating performances of authenticity from human presence itself.

Generative AI enables the production of synthetic identities capable of imitating emotional tone, conversational style, visual aesthetics, and forms of interpersonal engagement traditionally associated with human communication. AI-generated influencers such as Lil Miquela represent one of the clearest examples of this transformation. Although openly artificial, such digital personas accumulate followers, sponsorships, and audience engagement through performances of personality and relatability similar to those employed by human influencers. Their popularity

demonstrates that social media authenticity increasingly operates less as proof of human identity and more as a communicative aesthetic capable of being technologically reproduced.

This development reflects broader shifts within platform economies where visibility and engagement frequently matter more than stable distinctions between genuine and artificial participation. As Cotter (2019) argues, social media visibility is shaped through algorithmic systems that reward strategic optimisation and continuous interaction. Generative AI intensifies these conditions because synthetic communication can be produced rapidly and adapted efficiently to platform trends, audience expectations, and engagement metrics. AI-assisted influence therefore aligns closely with platform systems that already encourage performative self-presentation and continuous visibility management.

The growth of AI-mediated identity is also reshaping how users interpret trust and credibility online. Increasingly, social media audiences encounter content where authorship remains ambiguous or partially obscured. AI-assisted captions, automated replies, synthetic voiceovers, and machine-generated images may coexist with human-produced communication in ways that make distinctions between original expression and algorithmic generation difficult to identify. In some contexts, audiences respond with scepticism toward overly polished communication styles that appear "too AI-generated," particularly on professional networking platforms such as LinkedIn. This suggests that generative AI is beginning to influence not only how communication is produced, but also how authenticity itself is socially recognised and evaluated within digital culture.

At the same time, the rise of synthetic identities exposes tensions that already existed within influencer culture prior to generative AI. Influencer economies have long relied upon strategic branding, aesthetic curation, and algorithmically informed self-presentation. As Marwick (2015) notes, online visibility often depends upon transforming personal identity into a form of performative labour structured around audience attention and platform engagement. Generative AI does not create these dynamics entirely anew; rather, it intensifies and automates communicative practices already embedded within social media systems.

The integration of AI-generated personas into online culture also raises important questions regarding emotional attachment and parasocial interaction. Users increasingly form affective connections not only with human influencers but also with synthetic personalities, conversational AI systems, and virtual companions. Platforms such as Character.AI and Replika illustrate how AI-mediated interaction can simulate emotional responsiveness and social intimacy through conversational design. These systems are often marketed as forms of companionship, support, or personalised

interaction, reflecting broader shifts toward increasingly automated forms of social engagement within digital environments.

Critics argue that such developments may contribute to forms of emotional commodification in which interpersonal communication becomes increasingly mediated through commercially designed AI systems. As Couldry and Mejias (2019) suggest, digital platforms frequently transform human interaction into extractable forms of data and economic value. AI-mediated communication extends these dynamics by enabling emotional interaction itself to become scalable, programmable, and continuously available within platform ecosystems. The result is not simply synthetic communication, but the growing automation of social presence and relational performance.

However, AI-mediated identity should not be interpreted solely as evidence of cultural decline or deception. Many users engage with synthetic media knowingly and reflexively rather than mistaking all AI-generated content for authentic human interaction. In some contexts, AI personas function as forms of parody, satire, experimentation, or collaborative creativity. Online communities frequently remix, manipulate, and reinterpret synthetic content in ways that continue longer traditions of participatory digital culture identified by Jenkins (2006). Generative AI therefore contributes simultaneously to commercial automation and to new forms of creative cultural production.

Nevertheless, the increasing normalisation of synthetic communication alters the conditions under which authenticity operates within social media environments. Digital culture is progressively moving toward systems where visibility, emotional resonance, and social engagement may no longer depend upon stable assumptions regarding human presence or authorship. Authenticity increasingly functions as a performative effect produced through aesthetics, interaction patterns, and communicative style rather than through direct verification of human identity. Generative AI accelerates this transformation by enabling machine systems to participate directly in the production of socially recognisable forms of online identity and influence.

5. Meme Culture, Humour, and Synthetic Virality

Humour and meme culture have historically played central roles within participatory internet culture, allowing users to remix, reinterpret, and circulate shared cultural references across digital platforms. Generative artificial intelligence is increasingly transforming these practices by accelerating the production and circulation of synthetic humour, AI-generated memes, and algorithmically optimised forms of viral content. Social media platforms now contain growing volumes of AI-generated images, captions, absurdist jokes, and surreal visual combinations designed to imitate the aesthetic patterns of internet humour while maximising engagement and visibility.

The rapid spread of AI-generated meme culture reflects broader transformations in platform communication economies. Meme production traditionally relied upon collective participation, improvisation, and iterative remix practices emerging organically within online communities. Generative AI alters this process by enabling users to produce large quantities of visually coherent and trend-responsive content almost instantly. As a result, humour itself increasingly becomes automated and scalable within systems structured around speed and algorithmic circulation.

One notable consequence of this shift is the emergence of what many online users describe as "AI slop," referring to low-quality or excessive AI-generated content distributed primarily for engagement farming rather than creative expression. Such material frequently appears on Facebook pages, short-form video platforms, and automated content accounts where emotionally exaggerated imagery, synthetic sentimentality, or absurd visual combinations are used to maximise reactions and platform visibility. These forms of content illustrate how generative AI can intensify existing platform incentives favouring virality and engagement over originality or informational value.

At the same time, AI-generated humour is not reducible solely to spam-like automation or cultural decline. Many users employ generative AI creatively for parody, satire, and collaborative experimentation. AI-generated memes often derive humour precisely from the visible imperfections, absurdity, or uncanny qualities of synthetic media itself. In such cases, users engage reflexively with AI-generated aesthetics rather than passively consuming them. Synthetic humour therefore reflects both the commodification of digital culture and the continued adaptability of participatory online creativity.

However, the increasing automation of meme production raises broader questions regarding cultural saturation and communicative value within social media environments. As generative AI enables content production at unprecedented scale, online platforms risk becoming increasingly overwhelmed by repetitive and engagement-optimised material that prioritises circulation over meaningful interaction. The growing abundance of synthetic humour reflects a wider transformation in digital culture where visibility and algorithmic performance increasingly shape how communication is produced, interpreted, and valued online.

6. Platform Governance and Digital Trust

The growing integration of generative artificial intelligence into social media environments has intensified governance challenges relating to transparency, misinformation, authorship, and digital trust. Platforms increasingly confront difficulties in regulating synthetic media systems capable of producing realistic images, videos, voice simulations, and automated forms of engagement at large scale. While

social media companies have historically struggled with misinformation, bot networks, and manipulated engagement practices, generative AI significantly expands the scale and sophistication of synthetic communication within digital ecosystems.

In response, several major platforms have introduced disclosure mechanisms and policy adjustments relating to AI-generated content. Meta, YouTube, and TikTok have increasingly encouraged or required forms of labelling for synthetic media, particularly in contexts involving political communication, manipulated imagery, or realistic AI-generated video. These initiatives reflect growing recognition that users may require greater transparency regarding whether online content has been substantially generated or altered through AI systems. However, the effectiveness of disclosure policies remains contested because synthetic media often circulates rapidly across platforms where labels may be inconsistently applied, ignored, or removed through reposting practices.

The governance challenges associated with generative AI are not solely technical but structural. Social media platforms operate within commercial systems that reward engagement, visibility, and continuous user interaction. As Napoli (2019) argues, platform governance frequently involves balancing public-interest concerns against commercial incentives tied to audience attention and advertising economies. Generative AI aligns closely with these economic structures because synthetic content can be produced rapidly, cheaply, and at scale while remaining highly effective at generating engagement. Platform companies therefore face tensions between limiting harmful synthetic media and benefiting from the increased activity and circulation such content may generate.

At the same time, concerns surrounding AI-generated misinformation and deepfakes increasingly shape public debate regarding digital trust. Synthetic media systems can imitate visual realism and conversational authenticity with growing sophistication, making it more difficult for users to distinguish between manipulated and authentic content. Although public discussion frequently focuses on political misinformation and deceptive deepfakes, the broader issue involves the gradual destabilisation of trust within online communication environments. As synthetic media becomes more common, users may become increasingly uncertain not only about specific pieces of content but about the reliability of digital communication more generally.

The expansion of AI-generated communication also raises questions regarding accountability and authorship within platform ecosystems. Determining responsibility for harmful or misleading synthetic content can become difficult when communication emerges through combinations of user prompts, platform algorithms, and generative systems trained on large-scale datasets. Existing platform moderation systems are often

poorly equipped to address such complexities consistently, particularly given the speed and scale at which AI-generated content circulates online.

Importantly, governance responses based exclusively on content removal or automated detection are unlikely to resolve these challenges fully. Detection systems remain inconsistent, while generative AI models continue to improve in realism and adaptability. Moreover, rigid moderation approaches may create additional concerns relating to over-censorship, uneven enforcement, or limitations on creative and artistic expression. Effective governance therefore requires broader approaches combining transparency mechanisms, platform accountability, digital literacy initiatives, and clearer public understanding of synthetic media practices.

The rise of generative AI ultimately reflects a broader transformation in how trust operates within digital culture. Social media environments increasingly function through interactions where authenticity, authorship, and human presence cannot always be assumed or easily verified. Platform governance in the age of generative AI therefore involves not simply regulating deceptive content, but negotiating how communication, credibility, and participation are understood within increasingly AI-mediated systems of online interaction.

7. Policy Implications and Recommendations

The growing integration of generative artificial intelligence into social media environments requires governance approaches that move beyond simplistic distinctions between authentic and artificial communication. As synthetic media becomes increasingly embedded within everyday platform culture, policymakers, platforms, educators, and users must adapt to digital environments where AI-assisted expression is likely to remain a permanent feature of online interaction.

First, social media platforms should prioritise greater transparency regarding AI-generated and AI-modified content. While several companies have introduced synthetic media labelling systems, disclosure mechanisms remain inconsistent across platforms and are often insufficiently visible to users. Clearer and more standardised disclosure practices may help strengthen digital trust without requiring the complete restriction of AI-generated creativity or participation.

Second, platform governance should focus not only on detecting deceptive synthetic content, but also on addressing the structural incentives that encourage the mass production of engagement-optimised AI material. Algorithmic systems that reward virality, emotional manipulation, and continuous content circulation contribute significantly to the proliferation of low-quality synthetic media and “AI slop” content. Governance discussions surrounding generative AI must therefore address broader

platform economies rather than treating harmful synthetic content solely as an isolated technological problem.

Third, digital literacy initiatives should increasingly incorporate critical understanding of generative AI and synthetic media practices. Users require greater awareness of how AI-generated communication operates, including the limitations of synthetic realism, the commercial logics shaping platform algorithms, and the growing difficulty of verifying authenticity within digital environments. Media literacy in the age of generative AI must therefore extend beyond misinformation detection toward broader understanding of how platform systems shape communication itself.

Finally, future governance frameworks should remain attentive to the cultural and creative dimensions of synthetic media rather than approaching generative AI exclusively through restrictive or surveillance-oriented models. AI-assisted communication may also enable new forms of experimentation, participatory creativity, and collaborative expression within digital culture. Effective governance will therefore require balancing transparency, accountability, and digital trust alongside the preservation of creative participation within increasingly AI-mediated online environments.

8. Conclusion

Generative artificial intelligence is transforming social media culture in ways that extend beyond technological innovation alone. As AI-generated images, text, voices, influencers, and conversational systems become increasingly integrated into digital platforms, online communication is moving toward environments where human and machine-generated expression coexist in highly interconnected forms. The rise of synthetic media therefore represents not simply the emergence of new creative tools, but a broader shift in how visibility, authenticity, participation, and communication operate within platform societies.

This chapter has argued that generative AI intensifies existing dynamics already embedded within social media ecosystems. Platform economies have long rewarded visibility, engagement, emotional resonance, and continuous content circulation. Generative AI aligns closely with these structures because it enables scalable and algorithmically optimised forms of communication capable of producing engagement at unprecedented speed and volume. Synthetic media consequently functions not outside platform culture, but as an extension of its underlying economic and communicative logics.

At the same time, the increasing normalisation of AI-assisted communication reshapes how authenticity and identity are interpreted online. Social media authenticity increasingly operates less as proof of human presence and more as a performative

effect generated through aesthetics, interaction patterns, and algorithmic visibility. AI-generated influencers, synthetic humour, and machine-assisted communication practices demonstrate how online participation is becoming progressively detached from stable assumptions regarding human authorship.

However, the implications of synthetic media remain contradictory rather than uniformly negative or transformative. Generative AI may contribute to cultural saturation, engagement farming, and declining trust within online environments, while simultaneously enabling new forms of experimentation, participatory creativity, and communicative adaptation. The significance of AI-generated communication therefore lies not simply in whether content is artificial, but in how platform systems organise visibility, interaction, and value within increasingly automated digital cultures.

Ultimately, the rise of synthetic expression reflects a broader transformation in the relationship between communication and technological infrastructure. Social media platforms are entering a period in which authenticity, creativity, and social participation are increasingly negotiated within environments shaped by algorithmic systems capable of generating communication themselves. Understanding this shift requires approaching generative AI not merely as a tool, but as a structural force reshaping the cultural conditions under which online expression takes place.

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Chapter 18: Visualising environmental inequality: An interdisciplinary analysis of environmental vulnerability in the graphic adaptation of Parable of the Sower (2020)

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Abstract

Speculative fiction, in the form of graphic novels, can be seen as an emerging genre in contemporary literature. This interdisciplinary study investigates how environmental inequality and vulnerability are portrayed in Damian Duffy and John Jennings' graphic novel adaptation of *Parable of the Sower* (2020), which depicts a dystopian California destroyed by climate change and subsequent social collapse. The objective of this research is to analyse how the privilege gap in the narrative restricts individuals from performing moral responsibilities. By bridging the novel's narrative with secondary literature and contemporary South Asian examples, this study demonstrates how systemic inequality transforms ethical action into a luxury. This analysis is contextualised through engagement with leading scholarly and activist perspectives on climate justice, including the work of Dipesh Chakrabarty and Amitav Ghosh, as well as policy critiques. The study argues that environmental vulnerability is inextricably linked to privilege, class and access to resources. This influences marginalised communities to endure the most severe consequences with limited relief. Furthermore, the research contends that these structural inequalities emphasise conventional appeals to shared morality, as the immediate struggle for these people is to just to stay alive, looking after their immediate basic needs becomes much more important than following general rules about right and wrong. The findings establish a direct correlation between socio-economic stability and moral agency, highlighting the role of speculative narratives like *Parable of the Sower* as essential instruments for social critique and the re-conceptualisation of ethical duty on a global scale.

Keywords: Parable of the Sower (2020), Speculative Fiction, Climate Justice, Moral Agency, South Asia, Sustainability.

1. Introduction

Global problems can be analysed through different perspectives such as environmental sustainability, social sustainability and economic sustainability. Viewing global challenges through this framework emphasises the interconnected nature of humanity's actions with these aspects. This interconnectedness complicates the understanding of global problems. Furthermore, these issues are shaped by questionable morals and collective responsibility, as many systemic structures such as historical inequalities, economic models and cultural norms are tied to them. Therefore, to create a sustainable world, it is important to view global problems on a larger scale that embraces collective responsibility.

Subsequently, this analysis seeks to explore how literary texts examine global problems arising from questionable morals and a lack of collective responsibility, highlighting how these notions are exemplified in the graphic adaptation, *Parable of the Sower* (2020). To better evaluate these intersections, this paper draws upon fundamental ecocritical theories featured in *Ecocriticism: The Essential Reader* (edited by Ken Hiltner), which provides the framework for analysing literature's relationship with the environment. The central thesis of this paper investigates how environmental inequality and structural economic systems undermine shared morality, demonstrating that having the capacity to act on a moral compass or exercise collective responsibility is inherently dependent on resource access and privilege. The study will specifically look into climate and environmental issues faced by the South Asian region to bridge speculative fiction with contemporary and real-world crises.

2. Literature Review

When questionable morals are discussed in the context of sustainability, it requires a highly nuanced understanding as the issue often intersects with privilege. For individuals struggling to secure basic needs such as food and shelter, prioritising advocacy for broader issues such as climate change or environmental conservation can be difficult. Their immediate circumstances demand focus on survival rather than systemic reform. In these survival contexts, the conventional understanding of collective responsibility and moral compasses is challenged because even having access to such ideals requires resources that many do not have. Subsequently, it is not a matter of lacking morality but rather a reflection of limited access to act on broader ethical concerns. As emphasised in classic critical perspectives foundational to environmental humanities such as those compiled in Ken Hiltner's *Ecocriticism: The Essential Reader*, the representation of nature and crisis in literature cannot be separated from human culture, socio-economic politics and power dynamics. The root

issue may lie not in individual shortcomings but in structural economic systems that practice inequality, emphasising the need to address the pillars of sustainability simultaneously.

Economic hierarchy plays a significant role in determining the extent to which individuals are protected from global challenges, despite those higher in the hierarchy being most responsible for contributing to environmental issues. According to Oxfam (2020), the richest 1 per cent of the global population are responsible for more than twice the carbon emissions of the poorest half of humanity. In his work, *The Climate of History in a Planetary Age* (2021), Dipesh Chakrabarty has further explored this rich-poor dichotomy and emphasises how the wealthy have better access to protection compared to the poor during disasters:

> "The rich, they rightly pointed out, were far more responsible for the climate crisis and would always be lesser victims of the crisis than the poor" (Chakrabarty, 2021).

According to Chakrabarty, the wealthy remain less vulnerable to its consequences compared to the poor during natural disasters.

Amitav Ghosh (2016) advances this argument by nuancing its implications, highlighting that even if capitalism were to be "magically transformed tomorrow, military and political dynamics would still play a pivotal role" (Ummat, 2017). Ghosh elaborates on this concept by explaining that climate change is not merely a natural danger, it also creates additional catastrophes that harm various aspects such as social sustainability:

> "Climate change is not a danger in itself; it is envisaged rather as a threat multiplier that will deepen already existing divisions and lead to the intensification of a range of conflicts" (Ghosh, 2016, p. 126).

3. Methodology

This study utilises an interdisciplinary research approach combining qualitative textual analysis, ecocritical theory and environmental humanities frameworks to examine Damian Duffy and John Jennings' graphic novel adaptation of *Parable of the Sower* (2020). The methodology involves a comparative analysis that bridges the primary graphic narrative text with critical theoretical essays compiled in Ken Hiltner's anthology, *Ecocriticism: The Essential Reader*, alongside contemporary frameworks on climate justice from Dipesh Chakrabarty and Amitav Ghosh.

Furthermore, the study integrates contemporary secondary data sources, policy critiques, documentary evidence and real-world environmental case studies from the South Asian region. The examples are specifically targeting India, Bangladesh and Sri Lanka. This interdisciplinary mapping allows the study to evaluate how speculative themes of environmental degradation, structural inequality and human adaptability reflect contemporary geopolitical and ecological crises.

4. Results and Discussion

4.1. Privilege, Environmental Vulnerability and Moral Agency in *Parable of the Sower* (2022)

The correlation between economic stability and moral agency is explicitly illustrated through the characters and situations in the graphic novel adaptation. For instance, in *Parable of the Sower* (2020), Lauren finds it difficult to endure her feelings of empathy when she encounters several injured people around her town and due to her condition of being hyper-empathetic, she feels their pain on a deeply personal level:

> "I tried not to look at them as we rode, but I couldn't help seeing…" (Duffy and Jennings, 2020, p. 19).

Regardless of her empathetic feelings, neither Lauren, nor her community possess the means to assist those that dwell along the roadways and are injured. This is because they lack access to medicine or sufficient money to treat them all.

Parable of the Sower (2020) portrays the rich-poor dichotomy and uneven vulnerability by adding another level of understanding through the incident where the dwellers go to watch the news about travelling to Mars, at Yanni'' house and make comments such as:

> "Mars is too close to the people who've made such a hell of a life here on earth" (Duffy and Jennings, 2020, p. 28).

This statement reflects a significant perspective on humanity's exploration of Mars and space colonisation. The idea suggests that the people who have caused significant harm to Earth might bring those same problems to Mars if they were to settle there. It critiques the notion of fleeing to another planet while neglecting to fix the issues humanity has created here on Earth. Yet in hindsight, this reveals that these groups of people possess the financial ability to explore such territories and seek alternatives. These instances highlight their privileged access to safety and emphasise that they can afford to experiment with solutions after contributing to the calamity, all owing to their financial stability. Nevertheless, this is not the same for those from lower economic

classes, who are forced to endure the calamities caused while lacking even the slightest access to hope or opportunities for relief.

4.2. Geopolitical Disunity and Environmental Security in South Asia

Environmental security emphasises that sustainable environmental management cannot be achieved in isolation and it requires the integration of sustainable practices across other aspects. An example of this complexity is the potential threat posed to both Indian and Bangladeshi citizens due to the Sundarbans' upstreaming and the increasing salinity of water. Rising sea levels present a significant danger to densely populated coastal regions. In India, up to "50 million people are estimated to face displacement due to sea-level rise, while in Bangladesh, the number could reach as high as 75 million" (Danda, 2021).

Despite the circumstances, implementing preliminary measures to mitigate the crisis before millions become refugees has been challenging. Since the Sundarbans' mangrove habitat spans across India and Bangladesh, both governments have failed to mutually agree on practical solutions. This was evidenced by varied research studies adopting multiple approaches and remains a critical question where both governments are criticised. For instance, during a panel discussion on environmental security in the Sundarbans during the climate change era, Dr. Smruti Pattanaik (2021) emphasised that this is a cooperative mechanism where both countries should be involved but due to the lack of political sensitivity, they have not become very mutually supportive.

Chakrabarty has further explored this idea emphasising how the climate crisis is forcing us to realise that politics and justice should not be limited to humans. It is quintessential to start considering the well-being of the "nonhuman", which includes animals and plants (the living), as well as rivers, oceans, and the atmosphere (the nonliving). The Sundarbans crisis provides a real-world example to understand this matter, through the nature of the crisis which involves both plants and waters.

"Yet the planetary environmental crisis calls on us to extend ideas of politics and justice to the nonhuman, including both the living and the nonliving. The more this realisation sinks in, the more we realise how irrevocably humanocentric all our political institutions and concepts are. " (Chakrabarty 2021, 11).

This inability to cooperate highlights how political interests often challenge collective responsibility, leaving issues unaddressed. Subsequently, the conflict between the two nations highlights the exacerbation of this calamity. Without a unified and collaborative approach, both countries risk facing a future where vast numbers of their populations are displaced.

4.3. Climate Migration and Global Moral Responsibility

In addition, human division becomes prominent during times of crisis, which is evident in how communities approach the challenges they encounter. Bangladesh, for instance, is one of the most vulnerable countries on Earth due to its precarious geographical location. They often experience cyclones because of its location near the Ganges-Brahmaputra-Meghna Delta which is a low-lying region close to the Bay of Bengal that is prone to natural disasters. These cyclones usually result in severe storm surges and flooding. Additionally, rising sea levels and upstream flooding in Bangladesh have forced millions of its citizens to migrate. According to migration experts, "By 2050, 26 million people will be displaced due to climate change, with 19 million of them coming from Bangladesh alone" (Al Jazeera, 2024). Other countries in South Asia face similar threats from rising sea levels and upstream flooding.

Consequently, the geographical positioning of these countries has placed them in this vulnerable situation. While governments are aware of the potential dangers and their impact on populations, these challenges pose significant threats to social and economic sustainability. Addressing these issues requires confronting their root causes, while also acknowledging that these vulnerabilities stem from their geographical positioning.

Global warming lies at the heart of these issues, with carbon emissions being a primary driver. They contribute to glacier melting which in turn, causes sea levels to rise. Historically, the United States and in present day China remain the largest carbon emitters on Earth. This places these nations in a morally questionable position, as they bear considerable responsibility for the severe disasters affecting millions within South Asia. These incidents emphasise that global problems are not confined to a single country or region. They provoke ethical questions about how far other nations acknowledge their accountability for the tragedies experienced by vulnerable populations from other regions.

5.4. Dietary Habits and Ideological Adaptability

With the ongoing climate changes, food production has been severely affected, leading to fluctuations in crop yields. For example in, *Parable of the Sower*, Lauren confesses that she has never eaten bread as it was “too expensive” (Duffy and Jennings, 2020) due to the scarcity of wheat. However, Lauren discovers that acorns which grow on oak trees resilient to extreme heat and dry conditions are a more abundant alternative crop. Despite this, her father remarks, “They have no tradition of eating them, don’t know how to prepare them” (Duffy and Jennings, 2020). This highlights the human inability to adapt to alternative solutions. People struggle to change their habits and explore sustainable living patterns due to a lack of familiarity with such alternatives.

A similar situation exists in Sri Lanka providing a key example. Changes in rainfall patterns have drastically reduced Sri Lanka's paddy yield subsequently leading to increases in rice prices. The country has failed to embrace alternative food sources effectively despite the high demand for rice. The United Nations representative for Sri Lanka, Azusa Kubota in collaboration with the World Food Programme, is campaigning to promote underutilised superfoods in the country. She emphasises that amaranth, jackbean and taro are abundantly available in Sri Lanka but are under-consumed as people continue to rely on rice as their staple food. This case study highlights the need for Sri Lankans to adapt to alternative means, given the questionable future of paddy cultivation amidst changing climate patterns. Ideological accountability such as adaptability, is essential to finding solutions to problems like these. Subsequently, both the text and real-life examples emphasise the importance of adaptability as a collective responsibility, which is essential to addressing global issues such as hunger.

5. Conclusion

The exploration of sustainability through environmental, social and economic lenses demonstrates the interconnectedness of humanity's actions with systemic structures in creating global problems. These issues are shaped by privilege, access and structural inequalities. By establishing a direct correlation between socio-economic stability and moral agency, this study demonstrates that systemic inequality undermines conventional ethical expectations, transforming what should be shared moral actions into inaccessible privileges for marginalised populations.

Ultimately, achieving sustainability is not solely about addressing immediate issues but also reshaping structural, political and economic systems for long-term solutions. When contextualised through classic environmental anthologies, speculative graphic narratives such *Parable of the Sower* stand out as key instruments for global social critique, promoting a critical re-conceptualisation of ethical duty and environmental accountability across borders.

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Chapter 19: Migration, Citizenship and Identity Politics: Understanding the NRC Debate in Assam

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Abstract
As the world is now gripped with the refugee crisis and debates rage on their acceptance in various countries in the world, it may be the right time to look back into the Assam refugee crisis and human migration. Around eighty years after the 'Great Divide', the crisis is still prevalent in the post-independent India. The debates center mostly on the broader theme of what impact the refugees would have if they are allowed to settle in a particular society. So it will be pertinent to look at what legacies, previous conflicts, and the mass movements arising out of it leave in the societies these refugees moved into. The enactment of Citizenship Amendment Act (CAA), 2014 and introduction of National Register of Citizens (NRC) has made new debate in the crisis. One wonders whether citizenship will be granted more than 78 years after independence. The Government is determined to go ahead with its plan of action despite the protest movements, almost endemic. Consequently the question persists that – is the CAA will be able to resolved all the basic problems of the citizens and ensure the minimum entitlements? At the back of all these are narrow vote bank politics and the lack of a well-defined refugee policy. This article is an attempt to comprehend how document-based state policies open new fault lines and contradictions when it comes to citizenship claims. The exercise of the NRC in Assam indicates that abstract documentation not only becomes exclusionary in nature however fails in its purpose. The reliance on identity documents, as a tool of state power and identification, demonstrates the incoherent character of state machinery while also having overwhelming humiliating effects on citizens' legal status.

Key Words: Partition, Assam, Migration, Refugee Crisis, CAA, NRC

Introduction

The dilemma of immigration in India's northeastern belt and dissents against legal proceedings to legitimize (Citizenship Amendment Act, 2019 or CAA) and delegitimize (National Register of Citizens or NRC) is a major challenge in Indian polity. This recent inspired aspect triggers the issue of infiltration and the protest movements against them. As the region arose through the aftermath of the "the residual fallout of colonial politics and administration", or a freak "curious product of the partition", is advantageous to "understanding this crisis. The Indian North East or North East Indian Region (NER) is important given that it is strategically located geographically, ecological resources and cultural diversities. With 4,096 kilometers of international border it has a life and history of its own, which is intricately woven into the region's annexation to the imperial administrative apparatus beyond that imposed frontiers and territorial borders are being delineated in an ad hoc and violent fashion (Roluahpuia: 2020). Since the colonizers, later followed by postcolonial conflict have molded this region, the "uninhabited land" of 'Durable disorder' marked by insurgency and counterinsurgency. This has led to human and material losses, weakened the foundations of democratic forces of the region and institutionalized authoritarianism (Baruah 2005). Conceptualizing CAA and NRC, understanding with historical debates on Social Movement Perspective, federal negotiations; barter of constitution with the chequered history of sovereignty and the complex relationships with citizenship (Deka: 2019). The CAA is a "gentle legislation" that helps certain groups of undocumented immigrants who came from specific non-muslim minority communities (Hindus, Sikhs, Buddhists, Parsis, Christians and Jains), and were persecuted by Muslim neighbors in Bangladesh or Pakistan or Afghanistan to become Indian through credential documents (Singh: 2024). The NRC is the citizen register of Assam. Its main goal is to recognize bonafide citizens, and exclude all illegal migrants. As it is primarily a provincial issue, a demand arose and is expected to be imposed nationwide to find out the infiltrators and eventually sent back to their ancestral land (ToI: 2019).

Research Methodology

This paper deals with the refugee crisis and citizenship dilemma in Assam, mainly due to CAA and NRC. This study adopts a qualitative and historical-analytical methodology based on secondary sources generated from government reports, census data, legal documents, academic books, journal articles, and news papers archives. The Findings of the research will help to detect the main reasons behind the citizenship crisis in Assam will find out logical solution of this decades old problem.

Review of Literature

Abhishekh Saha (2021) explained about what happened to people of certain migrant communities in Assam when they set out to establish their Indian citizenship through the NRC and other processes. This book help to develop an empathetic understanding of the crisis of and challenges related to citizenship in Assam as the citizenship, refugees and statelessness are critical issues for India and the world today.

Anupama Roy (2019) deconstructs the "hinge point" from which the legal and philosophical contradictory tendencies, represented by the Citizenship (Amendment) Bill, 2016 and the National Register of Citizens, emerged. First, a hyphenated citizenship associated with the NRC, which made citizenship contingent on conditions of descent specific to each state, and second, a national citizenship associated with the CAB which has made religion a principle of distinguishability in the creation of bounded citizenship. Paradoxically these tendencies have become conjoined in the contemporary context and coexist in a relationship of contradictory cohabitation and alter the framework of Indian nationality.

Diganta Hatiboruah (2021) critically examines the phenomenon of illegal migration to Assam and provisions of Citizenship Amendment Bill, 2016 to address it. With distinct analytical frame and empirical findings, the research investigates historical and political dynamics responsible for the illegal migration from Bangladesh and growing dissatisfaction among the people in the region and reaction of the Governments, both Central and State, towards the problem. The volume is undoubtedly an addition regarding information on National Register of Citizens of Assam, migration problem and regional imbalance in the state, demographic change, impact of illegal migration in Assamese culture and emergence of different political movements including Assam movement.

N.C. Dev (2020) explained that the Northeast protests against the Citizenship Amendment Act (CAA) primarily because indigenous communities fear the legislation will legalize large-scale migration from neighboring countries and endangers their languages, cultural identities, and political representation, while actively violating the demographic protections promised by the historic Assam Accord 1985. These specific demographic, political, and historical concerns complicate the national discourse on the CAA.

Ram Puniyani (ed.) (2020) try to cover most of the aspects of the recent uprisings, protests, the response of the state and future course of action related to the citizenship dilemma in Assam.

Ranabir Samaddar (1998) analyzes the issues of migration, human rights, demography and ethnic studies within a richer perspective which accommodates the historical, cultural and geographic dimensions along with the economic and demographic. This

book challenges the validity of the concept of the nation-state in the context of post-colonial South Asia. The author demystifies the constructs of 'borders' and 'national territory' by bringing to the fore the viewpoints of the migrants themselves and argues for a new methodology which will accommodate the logic of historical continuity as well as the rights of the people compelled by circumstance to be on the move. The volume will be of interest to students and scholars.

Sanjib Baruah (2005) analyzed the causes and seeks to comprehend the political meaning and significance of the persisting ethnic militancy in Northeast India. The prolonged counter insurgency operations in the area have eroded the democratic fabric of the region where the army has institutionalized its authoritarian practices. The formal and informal structures of governance of this parallel regime, the intellectual ideas that shape it, and the resultant erosion of the democratic fabric of the region are the major themes of this work.

Sushanta Talukdar (2020) explained that he CAA has added to the ethnic complexities of settling the question of who is an "illegal migrant" in the north-eastern region. Defining who is indigenous in each state there is expected to be a new political puzzle.

Udayon Misra (2017) outlines the present contentious issues confronting the state. Explained the roots of these disputes and how the challenge posed by Assam held serious consequences for the nation as a whole, also examined the developments that occurred in the years preceding independence and the partition. The burden of those momentous years still rests heavily on Assam's contemporary political scenario.

W. Van Schendel (2002) sketched the position of tens of thousands of people living beyond the reach of state and nation in dozens of enclaves in South Asia. In his view, the connections among nation, state, territory, sovereignty, history, and identity are all problematized. There are nations without states, new nations that are invented and older ones disintegrate, and older diasporic nations that are being joined by a host of new transnational communities. Nations are now conceived as more fluid, malleable, and unpredictable than ever before.

Historical Background of Migration in Assam

As for this is the 21 century, people of an incredible number of ethnic background 220+ various dialects with an impressive diversity, Bengalis, Nepalese, or some in Myanmarese; they are Tibetan people and Indian Indo-Gangetic-plain, Himalayas and Tibet, came to this region maybe Austro-Asiatic speaking immigrants from East and Southeast Asia at different occasions and settled in, and many were displaced to different localities of this region. However the migration and settlement process was stiff as there were frequent conflict, displacement and adjustment (between the great

majorities who had settled) at each other (Srikanth: 2014). Extension of British control over the North-East in 1826 following the "Treaty of Yandaboo" was the initial exercise in demarcating the frontier in a physical way on the ground and fixing the region based on territory governed through rigid governance. The Inner Line Permit system (1873) and inception of "Restricted Areas" under the Government of India Act, 1935 by the colonizers disrupted the region's traditional way of life. As the natives could not cooperate with the economic ploy of the colonizers, they fetched laborers for tea plantations from other provinces. Also transported Bengali officers, and lawyers, and staff to conduct administration, which created confrontation with Assamese nobles and indigenous people. They moved Musalman peasants from Bengal to Assam, occupying barren lands of late 19th and early 20th centuries (Cons: 2002). The state witnessed influx during Mohammad Sadullah led government. Partition of India in 1947, transformed a mass people to refugees overnight. About 2.6 million of them from Pakistan arrived in Assam and Tripura. Again in 1971 due to the war in Bangladesh influx of refugees came to the region. Most of them settled here since then (Baruah: 2021). The Chakma and Hajong community were forced to enter the region because they were being ill-treated in Chittagong Hill Tract. The Chin community was being persecuted in Burma, now Myanmar. They came to Mizoram between1988 and the mid-1990s. The "Burmanization" process made it tough to keep their distinct language, religion, and culture. Tibetan refugees took shelter in this region in 1959 with the 14th Dalai Lama (Boruah: 2019). Bengalis have been living for a long time across the Barak valley. There were discords between Bengalis and Assamese because they belonged from different stories and backgrounds. In 1838, the East India Company made Bengali the official language in the state instead of Persian. The Assamese people considered the move as unfair attempt to replace their language. That created a longstanding conflict between the two communities (Samrat: 2019) and made the situation worse over the time span. When people were thinking to feel like oneness, the NRC caused a disruption (Dev: 2020).

The first NRC in India was enforced in Assam after post-independence based on the 1951 census. But only in a 2012 report for the first time the state administration disclosed about the state's unresolved migrant issue. The government's objective is to eliminate all the intruders and will secure the international borders according to that report, but unable to answer about mass intrusion (Saha: 2017). The government was also remained incapable to end the demographic alteration in this northeastern state. The NRC is being updated to include Indians using their documents prior 1971. Due to the growing public anger and ultimatum given by the indigenous the state administration was forced to implement the NRC procedure to check approximately 33 million inhabitants ancestral records (Field, Tiwari, Hemadri, singh & Rastogi: 2019). A significant poor population is facing problems as they lacked appropriate records (Puniyani: 2020). Migrants who entered in India on or before January 31, 1966 could

become Indian citizens naturally (Genova: 2002), and before March 25, 1971 could also become Indian (Hatiboruah: 2021). The fact is that one-third of Assam's total population is alleged illegal migrants, who have taken over indigenous lands and caused social, political, economic conflict in the society. With the state's political patronage Indian citizenship has been conferred to the unlawful settlers while political inclusion such as voting right is also granted to them which represents a major security threat to the country (Misra: 2017). It is evident that Assam witnessed abnormal population growth compared with the national growth rate, as there is lack of visible migration within the state, a grave concern. The Election Commission of India (ECI) indicated an unusual growth of electorates in 40 legislative assemblies in 1994 which indicated the existence of "foreign nationals" in Assam. From 1901 to 1971, in seven decades Assam's population growth was 343.77 percent, compared to the national growth rate of 150 per cent (Baruah: 1986) and between 1971 to 1981, the state's population growth was 36.3 percent. The Government of India's population registration data revealed that Assam's natural population growth was 0.5 percent less in 1970-72 compared to the national growth and 1.2 percent less in 1976-78 which exposes that about 1.8 million foreigners intruded into Assam during this decade. Assam witnessed an abnormal voter surge (89%) during 1971 to 1991 indicating presence of undocumented foreigners in the state's voter list (Karmakar: 2019). The last released linguistic data has revealed that Assamese Speaking declined from 58 to 48 percent during 1991- 2011 while Bengali speaking people in Assam went up from 22 to 30 percent in this same span (Government of Assam: 2011-12). The Central Home Ministry in August 1975, issued a directive to the state governments and union territories to remove foreign nationals' names from their respective electoral register immediately. However, that directive was undermined and not implemented.

TABLE: 1 Population Growth in Assam and India (percentage)

YEARS	ASSAM	INDIA
1901-11	+16.8	+5.8
1911-21	+20.5	-0.3
1921-31	+20.1	+11.0
1931-41	+20.5	+14.2
1941-51	+20.1	+13.3
1951-61	+35.0	+21.6
1961-71	+35.2	+24.8
1971-81	+23.3	+24.7
1981-91	+23.6	+23.5
1991-2001	+18.8	+21.3
2001-2011	+16.93	+17.6

SOURCE: Sanjib Baruah, "Ethnic Conflict, and Political Turmoil – Assam, 1979-1985, in "Asian Survey", Vol. 26, No. 11 (Nov., 1986), p. 1187; Centre for Monitoring Indian Economy (CMIE) Pvt. Ltd., basic statistics relating to Indian Economy.

TABLE: 2 Major Language Groups in Assam - 1971, 1991, 2001, 2011								
Language	Number of Speakers (as mother tongue in 1971)	%e of Total Population	Number of Speakers (as mother tongue in 1991)	% of Total Population	Number of Speakers (as mother tongue in 2001	% of Total Population	Number of Speakers (as mother tongue in 2011)	% of Total Population
Assamese	8,904,917	60.89	12,958,088	57.81	13,010,478	48.81	15,095,797	48.38
Bengali	2,882,039	19.71	4,856,532	21.67	73,43,338	27.55	9,024,324	28.92
Hindi	792,481	5.42	1,035,474	4.62	15,69,662	5.89	2,101,435	6.73
Bodo	533,713	3.65	1,184,569	5.28	12,96,162	4.86	14,16,125	4.54
Gorkhali/ Nepali	349,116	2.39	432,519	1.93	564,790	2.12	596,210	1.91
Karbi/Mikir	191,354	1.31	355,032	1.58	406,160	1.52	511,732	1.64
Miri/Mishing	177,226	1.21	381,562	1.70	517,170	1.94	619,197	1.98
Oriya	150,196	1.03	140,782	0.63	231,474	0.87	218,552	0.70
Manipuri/ Meitei	87,167	0.60	126,987	0.57	154,058	0.58	168,133	0.54
Santali	86,086	0.59	135,905	0.61	242,886	0.91	213,139	0.68
Munda	76,894	0.53	75,420	0.34	93,088	0.35	71,903	0.23
Garo	76,004	0.52	114,779	0.51	144,767	0.54	172,520	0.55
Dimasa	38,507	0.26	84,654	0.38	108,133	0.41	1,31,474	0.42
Rabha	32,400	0.22	112,424	0.50	130,875	0.49	1,01,752	0.33
Lalung/Tiwa	9,954	0.68	32,633	0.14	26,480	0.10	31,821	0.10
Deori	12,190	0.08	15,965	0.07	23,366	0.09	27.441	0.09
Others	224,908	1.54	371,087	1.66	792,641	2.97	704,021	2.26
Total	1,4625,152	100.63	22,414,322	100	26,655,528	100	31,205,576	100

Sources: Census of India, 1971, Series 03-Assam, Part I-A, General Report (Government of India, Controller of Publications, 1977, p.90 (https://www.censusindia.gov.in>catalog>study-description); Census of India, 1991, Series 04-Assam, Part IV-B(i)(a)-C-Series, 1999, pp.4-9 (https://www.lsi.gov.in>bitstream>40436_1991_LAN); Office of the Registrar General & Census Commissioner, India: Population Census 2001, Table C-16: Population by mother tongue, Assam – 2001 (https://www.censusindis.gov.in>...>Central Data Catalog); Office of the Registrar General & Census Commissioner, India: Population Census 2011, Table C-16: Population by mother tongue, Assam – 2011 (https://www.censusindis.gov.in>...>Central Data Catalog), Ministry of Home Affairs, Government of India.

Assam Movement and Assam Accord

In view of the mass anger and discontent groups from Assam filed complaints to the government. The All Assam Student Union's (AASU) led the people in protesting against the alleged illegal migration from Bangladesh from1979 to 1985. During this six-long years 855 (later on 860 as submitted by AASU) young Assamese lost their lives. The government signed the landmark Assam Accord with the agitators on August 15, 1985 to resolve the longstanding issue (Government of Assam, India: 2026). The Assamese people transformed the protest into a movement against alleged illegal migration. They were confident to end the crisis to avoid being surpassed. For the first-time in Assam 47,000 foreigners was detected in electoral roll during 1978's Mongaldoi parliamentary by election that surprised and escalate discontent (Baruah: 1986) After investigation through the Registration of Electors Rules, 1960 about 36,000 names were deleted out of which 26,000, around 72% of them were confirmed as foreigners (Reddi: 1981). Upsurge of the masses against the foreigners and non-citizens, demanded that all undocumented migrants in the state who came and settled in Assam after 1951 should returned back to their paternal land. *Assam Andolon* was the extreme conflict to secure social, political, economic and land rights of the natives and check migration-related demographic alteration of Assam (Bardoloi: 1986), organized by the All Assam Gana Sangram Parishad or AAGSP and AASU. After witnessing the fierce nature of the agitation, on 2nd February 1980 the AAGSP and AASU demanded the government to end the migration crisis through effective means.

The Assam Accord on dealt with the foreigners specifically clauses 5.1 to 5.9 (Hatiboruah: 2021). Eventually in 1985 a political organization came into force namely Asom Gana Parishad or AGP, a joint forum of AASU and the AAGSP. The AGP assumed states' administrative power with the promise to infiltrator free 'Golden Assam' (Phukan: 1996). The Accord advocated for strict laws to evacuate all illegal encroachers and will protect tribal lands of Assam. Unfortunately, the implementation of the historic Accord is a distant dream to the Assamese. Successive governments at the Centre and state have failed to implement the pact for 40 years (Gitika: 2023). The Assamese mainly the indigenous want to protect their rights and traditions. The government must listen to their concerns and find a permanent solution to the

longstanding problem. The Assam Accord created historical disagreements among the Assamese tribal communities and also made fractions in the society. Due to these several political parties and literary bodies and students' organizations and insurgent outfits have come into existence to fight hard for community identities and fast socio-economic and cultural development alongside the implementation of their constitutional rights yet their requests did not meet the desired expectations (Gogoi: 2013). Also the Illegal Migrants (Determination by Tribunals) or IMDT Act, 1983 considered people who arrived before March 25, 1971 in Assam as legal residents caused tensions. However, for remaining India the deadline for acquiring citizenship is July 19, 1948. As for this, clause 28 of the IMDT Act was contradictory to the Indian Constitution. Was considered void (72 Writ Petition: 2000).

NRC and Citizenship Politics

No significant initiative has taken to resolve the foreigner's issue. In 2003 the Government of India amended the Citizenship Act requiring the preparation of a citizens' registrar (Anshuman 2019). Under then Prime Minister Dr. Manmohan Singh's leadership a high-profile meeting was held in 2005 to work with the Assam State Government and AASU to update the National Register of Citizens (NRC) and create a National Population Register (NPR). The NPR is an extensive citizens' record that includes all citizens of India. The database will absorb the Unique Identification system (UID) after its completion because the new system would be more complete and would become the mother database for identity purposes. This is obligatory for every Indian citizen to enroll in the NPR (ToI: 2019). The Tarun Gogoi-led government in Assam built detention camps for declared foreigners or alleged illegal migrants. The government was decided to sent back them to their homeland. In 2011 India and Bangladesh signed a prisoner transfer agreement (PIB 2011). The process of updating the NRC list began in Assam after the Supreme Court's intervention only in 2013. The claim submission procedure was active from the end of May 2015 to August 31, 2015. The personal and family details submitted by the individuals were sent to scrutiny to decide eligibility of their inclusion in the NRC list and has been given fair chances to establish their claim decently. Pursuant to the apex court, the Draft NRC was released on July 30, 2018. After disposal of all claims and disputes and proceedings under Clause 4(3), total 3,11,21,004 eligible people were included in Final NRC. 19,06,657 people remained unauthenticated and declared foreigners (OSC, NRC: 2019). The process of detecting foreigners and modernizing the NRC only after the orders of Hon'ble Supreme Court as it aimed to enlisted Indians. March 24, 1971 was chosen as the cutoff for the NRC instead of July 1, 1987, as the basic date by birth as defined by the Citizenship Amendment Act, 1986. The elimination from the NRC was greater in tribal areas and lesser in border areas where illegal migrants had mainly settled (Jayal 2019). Excluded people from the NRC has detected as foreigners will face

prosecutions. However, there is substantial fear among migrated Bengalis who are often suspected of entering Assam after March 24th 1971.

Statistics show that the voter number in Assam surged more than 50% in nine years, from 5,701,805 to 8,537,493 during 1970-1979. That indicated that 4.1 million foreigners may have illegally entered into Assam during these years. In 2005, a three-judge panel headed by then Chief Justice R.C. Lahoti expressed alleged illegal immigration created grave concerns like insurgency. Undocumented immigrants have occupied Kaziranga National Park and Srimanta Sankardeva's birthplace, and many other historic installations. In 2017, H.S. Brahma led the committee for protection of land rights of indigenous people of Assam clarified that 15 of Assam's 33 districts are mostly occupied by Bangladeshi migrants whose intention is to seize land. For a permanent solution of this mess the government must ensure to stop any benefits or rights to the foreigners over the state's resources. These migrants seized and settled on agricultural land with the support of the corrupt government officials and greedy politicians (Roy: 2016). Meanwhile, as the NRC was nears completion, the Asom Sanmilita Mahasangha (ASM), an organization of indigenous and ethnic inhabitants, appealed to the Supreme Court against considering 1971 as the base year as who came and sheltered in Assam during 1951 to March 25th 1971, will get citizenship comfortably and endangered the existent of the indigenous of Assam (73 Writ Petition: 2012).

CAA and Contemporary Controversies

The key aim of the CAA Act (2019) is to shield Bengali Hindu migrants who settled in Assam since pre-British era (Roy 2019). The present Assam government assumed state power by vowing to safeguard its "*mati, bheti* and *jaati*" i.e., its land/territory, home/furniture, community/social fabric from illegal encroachments. The proposed offer of citizenship to Hindu immigrants was regarded as a betrayal of their pre-election pledge (Hausman 2020). However, in 1986 parliament added clause 6A to the Citizenship Act, 1955 that created a sixth kind of citizenship in Assam through the categorizing 'foreigner'. The 1971 base year for Assam and 1951 for India except Assam emerged as a confrontation between Assamese nationalism and national interest also constructing an endeavor to preserve status quo (India Today: 2022). The exception caused numerous grievances, but the 1971 base year is seen as a cornerstone of the Assam Accord, which is widely endorsed by the Assamese and offers an solution to the complicated issue of "indigenous/outsider" versus "citizen/migrant" and "alien/refugee" (Sarma: 2006), especially since the Indian government promised to follow clause 6 of the Accord to shield the Assamese cultural and economic identities and land rights. The government has undermined the main goal of this Accord (Deka: 2019). The objective of the Citizenship Amendment Act or CAA is to protect persecuted Hindu migrants from neighboring countries. The indigenous agitation is

continuing to remove the CAA. They fear that the act will ruin their identity, history, culture, and language (Sharma: 2019). The deadline for obtain Indian citizenship has also been altered to December 31, 2024, for the persecuted migrants (Express News Service: 2025) instead of December 1951, the baseline for identifying and deporting the undocumented migrants (Scott: 1998). The indigenous people are opposing the CAA because the law is unfair in nature to them (Azad, 2020). The incumbent Bharatiya Janata Party has rejected the 2019 NRC. The party thought it would damage its Bengali Hindu support base (Sarma & Hazarika; 2020). The state government wants to introduce Assamese as the official language of the state. They want to do through amending Article 345 of the Constitution. This would not apply to the Bodoland Territorial Areas, the hill districts and the Barak valley. But, the decision was not changed into action as Article 345 clearly states that the legislature of a state may by law adopt one or several language(s) mentioned in the 8th Schedule of the Indian Constitution to be used as official language (Talukdar 2020).

Foreigners Tribunals and D-voters

The Foreigners Tribunal or FT has developed substantial apprehension in both the Barak (the Bengali dominated) and Brhmaputra valleys (the Assamese dominated). FT settles the matters that the Foreigners Regional Registration Offices or FRRO send to it. The Assam Border Police refers cases to FTs for adjudication. The FT has been operational in Assam since 1964 based on the Foreigners Act, 1946. Since 1985 over 92,000 individuals have been declared foreigners by the 100 Foreigners Tribunals or FTs. Notable faults have been also evident like Mohammad Azmal Haque was asked to prove his citizenship in 2017, who was a retired Army officer (Deka: 2018). In 2024, the Assam government had asked its Border police wing to withhold the cases of non-Muslim illegal immigrants entering the state before 2015 to FTs and advised those migrants to apply for citizenship through CAA. In July, 2025, the state government instructed all districts to drop ongoing cases against them from the FTs following implementation of the Citizenship Amendment Act.

Doubtful or ‘D’ voters was introduced in Assam in 1997 by the ECI and prepared a list by including those suspicious people who allegedly could not provide evidence in favor of their Indian nationality. It does not exist in any other states of India. D-voter is marked as per the orders of the Foreigners Tribunals (FTs) and the subsequent judgments by the high court of the state. If a D-voter termed an Indian citizen by the judiciary, then the prefix ‘D’ is removed from his or her name (ToI: 2025). In the 2021 Assam Assembly election around 1.08 lakh individual have been disallowed from casting votes because the ECI has identified them as D-voters (Nath: 2021) and disenfranchised by the laws due to the dearth of genuine citizenship credentials. This category is termed as “an indigenous way of handling the controversy on the enfranchisement” of the alleged foreigners. Initially, about 2.35 lakh names were

marked as D-voters including serving and retired military and paramilitary personnel created widespread controversy. No Defense Ministry action exists to protect the dignity of those serving and retired military personnel. In 1997, Shah Alom Bhuyan, a security officer for the Assam chief minister was added to the D-voter category. No Defense Ministry action exists to protect the dignity of those serving and retired military personnel. If an FT determines someone's status is doubtful they send that person directly to a “detention camp”. Only the Guwahati High Court can decide the fate of the D-voters (SIddique 2019). The police officers and security personnel who attempt to vote are almost always labeled as D-voters. The xenophobia issue in Assam has been paired with the perception problem as the state experienced these unexpected numbers and errors (Saha 2019).

Critical Analysis

In spite of this, the rules can be framed for bringing to affect the CAA Act and hence unlikely to be executable only if rules are framed in accordance with the “conditions, restrictions and manner” mentioned in Section 6B of the CAA. The Act is a bundle of intricacies, where the rules framed, are expected to put light to such, and other provisions need to be accomplished before applying for citizenship by a person. Currently, the Indian government has lack of exact data regarding the figure of Hindu migrants who entered India due to religious persecution regarding i) their date of entry, ii) their whereabouts during all these years, iii) places where they are staying after their entry, iv) the occupation they are pursuing here, and above all v) their past criminal records, if any. All these are primary information required for processing applications for citizenship under the CAA and this would be very tough to make out cases of religious persecution in absence of any information about it. The practical question that will restrict the process of conferring citizenship to an applicant is when actually the applicant entered India. In deficiency of any information, the authority will have to depend on the certificates of the local administration or collectors which cannot confirm the actual arrival date (Hazarika: 2023).

Conclusion:

With religion temporarily taken away, Assam is now waiting for a logical conclusion to the six-decade-long struggle to protect its land, resources and migration related demographic concerns. It is a battle between the citizens and infiltrators and for better or worse for all Assamese (Belton: 2015). Now, some questions arise regarding foreigners of Assam - after finalization of NRC list and detection of them, how will they be deported? Will the expert committee formed by the central government to enforce section 6 of the Assam Accord be functioning in the proper way? Will the government observe the foreign problem of Assam from national points of view or national security or there any secret policy of Delhi to keep this problem forever? Now

after 55 years since March 1971, more questions that arise are - what will occur to the native people of this country – who entered Assam after the cut-off date? Or will the government solve the crisis in a humane way? The government has not any clear position on this (Siddique: 2019). Affirmative imperative should take to secure peace and also the future of this troubled land and urgency is necessary to undertaking these interventions. Assamese only wish to see almost the aliens expelled from Assam instead of their socioeconomic development. It will serve this purpose if the central and the state authorities acted collectively in good faith to settle the problem of migration. It is highly imperative to establish a full-fledged effective administrative mechanism. In this way we shall be able to complete the work. All the political parties should leave the vote bank for the well-being of Assam (Schendel: 2002). The Assam state government also needs to clarify the actual definition of Assamese promptly in order to logically solve the question of identity permanently.

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Chapter 20 : Importance of Labour Relations in Human Resource Management

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Abstract
The motivation behind the paper is to analyze work relations and HRM and furthermore it will purposely search in to a portion of the issues and difficulties in relations between Labor relations and HRM. Worker and work relations assume a significant part in reinforcing the business representative relationship. The representatives should be given a climate where they can work on their abilities and valuably use them. At the point when the workplace the executives and the representatives are both centered around the goal of making a powerful association, they fabricate a solid workplace. Work are the taking part laborers and regularly they are commonly around the specific age around (14 to 16 years) and underneath retirement (around 65).Labors are utilized in businesses and organizations for work and they are on the day to day wages and some are on the fix compensation. Human Resource Management is the investigation of individuals at work and the exercises related with enlistment and choice, preparing and advancement, maintenance, and word related wellbeing and security. A key part is Organizational Behavior, which looks at things like initiative, inspiration, representative mentalities, and efficiency. Work Relations is the investigation of how businesses and representatives cooperate to make a fair working environment. It has been seen that the class relations and the job of the state naturally bring the forefront the issue of types of opposition. The relations among work and HRM are basically significance on the grounds that HRM includes the method involved with utilizing individuals, fostering their abilities/limits, and using their administrations. In the present time to hold in the market hierarchical development is vital and this authoritative development can be accomplished on the off chance that there is an essential administration of HR. Abilities and information are the main impetuses of financial development and social improvement for any nation so the Human assets the board ought to look forward for giving an ever increasing number of abilities and information to the work.

Keywords: Employee, Employer, Organisation, Labour relations, Human resource management, Importance, Leadership.

Introduction

After the modern transformation of England in the period from around 1760to some of the time somewhere in the range of 1820 and 1840 and inside many years it is spread to Western Europe and the United States. From the modern upset to 21st century businesses is one of the significant pointers for the financial improvement of the any country. Presently day's enterprises are exceptionally fundamental for the financial improvement of the country as well as the monetary development of the country. Since by the businesses there is an additional creation of the products and other assembling things so by the ventures there is greater work open doors for individuals. For the any organization or any industry Human Resource the board is the machanisim of the executives and it is consider with individuals who working in industry people groups are having various fields like junier chief, sinier director, bookkeepers, assistants, managers both specialized and non-specialized divisions of any association. Work relations are additionally called as the modern relations Labor relations essentially imply that the relations of the business and representative at the work place. It can likewise allude as the managing between the administration and the business in the everyday working of the business. Modern Relation is an entire field relationship that exists in view of the fundamental coordinated effort of men and ladies in the business cycle of an industry. Modern Relation is the result of the act of Human Resource Management and worker relations.. The idea of modern relations has an exceptionally wide significance and implication. In the limited sense, it implies that the business, worker relationship limits itself to the relationship that arises out of the everyday relationship of the administration and the work. Changes in political and rustic climate is additionally one of the significant test for the Human Resource Management. In this challenge we can say that when an ideological groups appeared it sets the new regulations and guidelines thus while carrying on with work one ought to need to observe the new regulations and guidelines. Legitimate and political structures includes many changes inside which the modern framework in the nation is presently working. There is an obligation of Human Resource look at the ramifications and changes and achieves fundamental change inside the association with the goal that last use of human asset can be accomplished. Furthermore, it is the obligation of Human Resource chief to expect changes and set up the association to confront them with no breakdown in its not unexpected working.

Objective

- To know what employee and labour relations are in HRM.
- To find the benefits of employee and labour relations.
- To identify the practices that promote labour relations.
- To examine why employee relations are important in an organisation.
- To analyse the labour laws and suggestions for the industrial relations.

Literature Review

BHAVESH SARNA (2021) Employees as a gathering have been concentrated in the CSR writing for a long time, and the examinations have managed numerous viewpoints. The writing has concentrated on worker jobs in CSR from administrative, hierarchical, and individual viewpoints. Besides, the exploration has been led over different disciplines, like association science, maintainability science, and hierarchical brain research, as well as according to numerous hypothetical points of view like authoritative culture hypothesis, hierarchical recognizable proof hypothesis, and partner hypothesis. Be that as it may, the examination stays divided, spread all through different diaries and disciplines, and no exhaustive, efficient surveys of the worker relationship with CSR have been introduced.

Tim Morris (2012) Importance of representative relations systems in adding to a prosperous industry. Drawing upon an extensive variety of unique and undocumented material got from the banks and the associations, it investigates both manager and association systems and looks at the proceeding with rivalry for transcendence between the 'conventional' worker's guilds and the staff affiliations.

Crauise O′Brien, R. (1995) The first expectation was to take a gander at the likely commitment of worker obligation to top notch execution, the hardships of accomplishing that pcommitment and the relationship of the representative commitment to execution improvement. Three specific ideas arose as vital: the unmistakable spotlight on process improvement for creating new types of cooperation at work; the significance of representative implicit information for adding to handle improvement and another type of trust in view of mutual interest between employees and management as a crucial intermediary variable contributing to commitment.

Methodology

This Research is done through Doctrinal. It is about Impact of Labour Relations in Human Resource Management the study collected the information from Various Articles, Newspapers, Journal, Books the study contributes Employee and Labour Relations describe the relationship between employees, and between the employer and the employees. They include the contractual, practical, and emotional connection between the managers and their workforce. And also the study discusses benefits, importance, and significance about the Labour relations finally to analyse and give the general suggestions to improve employee relations.

Benefits Of Employee And Labour Relations

Commitment to the Organization A pleasant work environment is a good incentive for an employee to be loyal to their work. When the employees feel

connected to their employers and have a good understanding of them, they make efforts to do their tasks well. An individual that is committed to their organization would spread a good word about it among their community that brings in experienced and skilled workers to the company. It improves the brand image that is profitable in terms of the customer experiences as well.

Improvement in Employee Motivation Good relations within the company motivate the employees to work hard. If they feel satisfied with their environment and achievements, they are inclined to make efforts to improve themselves. Motivated employees turn out to be great team members, encouraging their peers to do better. Appreciations from their leaders and colleagues also make the employees feel motivated towards their tasks.

Employee Retention The employees must be made to feel valued about their skills and their work. Even if they are not satisfied with their work, a healthy work environment is a great incentive for employees to stay in the company. Additional employee benefits such as bonuses, regular appraisals, and upskilling offered by a firm may urge the employees to stay loyal to the company. The cost of recruitment and training can be reduced if companies invest in the retention of employees.

A Healthy Office Culture Healthy workplace culture is highly dependent on how the employees are treated in the company. If the employees feel that are not treated equally by their leaders, it may lead to workplace conflicts. Discrimination, harassment, or biased treatment of the employees makes them feel unvalued and insecure about their work. The employees must have a good relationship with their employers concerning their personal and professional lives. Employers can solve workplace conflicts by investigating into conflicts and resolving them in time, fostering their relationships.

Increased Revenue Enhanced labor relations result in improved work productivity, and work profits. It also plays an important role in customer retention. When the employees feel satisfied with their work, they pay attention to the needs of the clients, resulting in a positive customer experience. Engaged employees are more committed to their tasks and this growth can bring better outputs and revenues for the company.

Enhanced Focus on Organization Goals Employee relations promote their need to achieve the goals of their organization with more vigor. Workers who are familiar with the long-term goals of their company, are more efficient in their tasks and focused on how they need to achieve those goals. Having a sense of purpose motivates them to enhance their skills to accommodate in accordance to the goals.

HUMAN RESOURCE MANAGEMENT



1

Human resource management (HRM) is the practice of recruiting, hiring, deploying and managing an organization's employees. HRM is often referred to simply as human resources (HR). A company or organization's HR department is usually responsible for creating, putting into effect and overseeing policies governing workers and the relationship of the organization with its employees. The term human resources was first used in the early 1900s, and then more widely in the 1960s, to describe the people who work for the organization, in aggregate. HRM is employee management with an emphasis on those employees as assets of the business. In this context, employees are sometimes referred to as human capital. As with other business assets, the goal is to make effective use of employees, reducing risk and maximizing return on investment (ROI). The modern HR technology term human capital management (HCM) has been used more frequently compared to the term HRM. The term HCM has had widespread adoption by large and midsize companies and other organizations of software to manage many HR functions.

[1] Source showing Human resource management (HRM) is the practice of recruiting, hiring, deploying and managing an organization's employees. HRM is often referred to simply as human resources (HR).

Importance Of Human Resource Management

The role of HRM practices are to manage the people within a workplace to achieve the organization's mission and reinforce the culture. When done effectively, HR managers can help recruit new professionals who have skills necessary to further the company's goals as well as aid with the training and development of current employees to meet objectives. A company is only as good as its employees, making HRM a crucial part of maintaining or improving the health of the business. Additionally, HR managers can monitor the state of the job market to help the organization stay competitive. This could include making sure compensation and benefits are fair, events are planned to keep employees from burning out and job roles are adapted based on the market.



[2]

Societal objectives: Measures put into place that responds to the ethical and social needs or challenges of the company and its employees. This includes legal issues such as equal opportunity and equal pay for equal work.

Organizational objectives: Actions taken that help to ensure the efficiency of the organization. This includes providing training, hiring the right number of employees for a given task or maintaining high employee retention rates.

Functional objectives: Guidelines used to keep HR functioning properly within the organization as a whole. This includes making sure that all of HR's resources are being allocated to their full potential.

[2] Source showing Objectives of the HRM

Personal objectives: Resources used to support the personal goals of each employee. This includes offering the opportunity for education or career development as well as maintaining employee satisfaction.

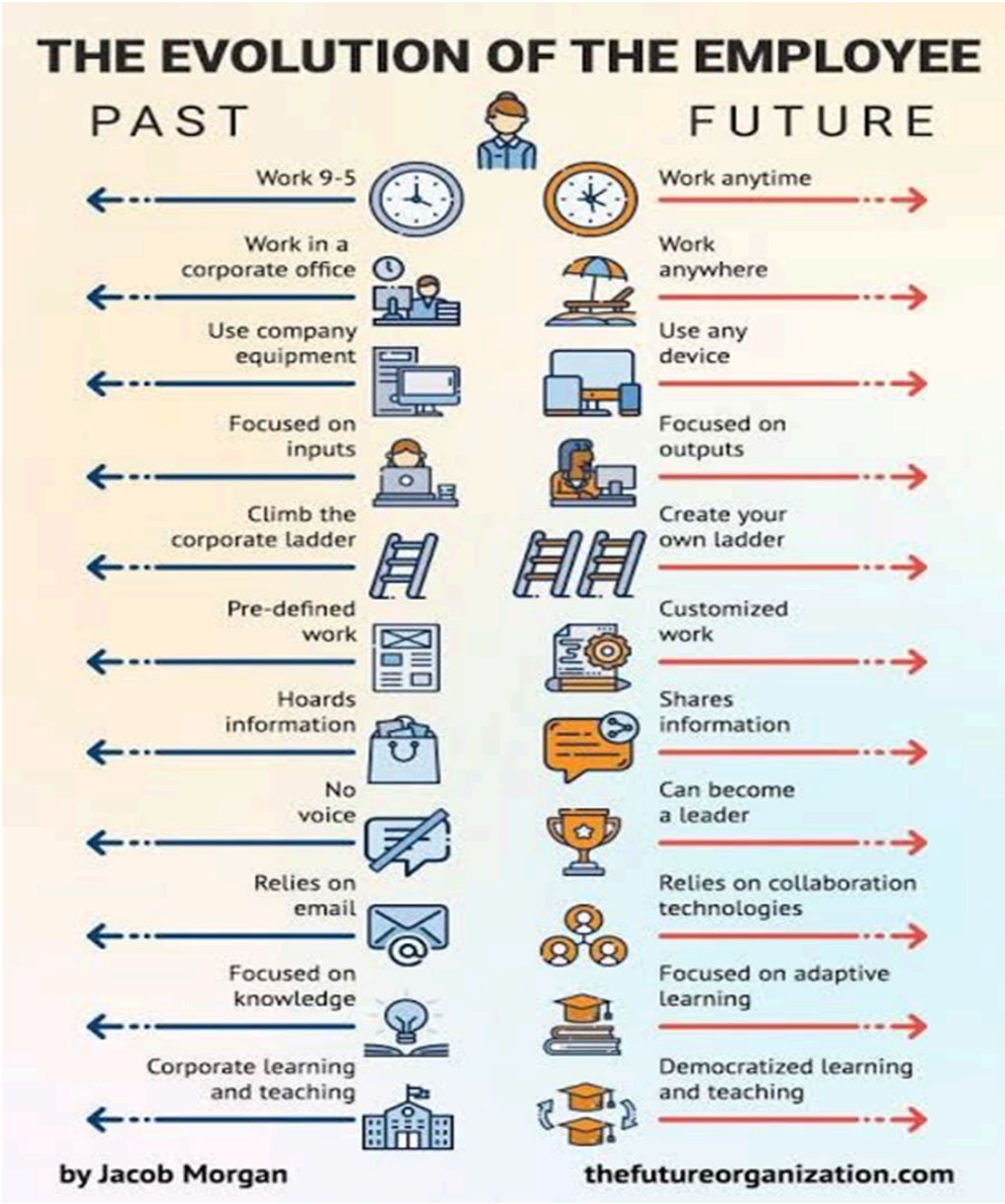
Practices That Promote Labour Relations

1. **Present the Employees with the Company Goals** Make sure that the workers are aware of what is expected of them, and that they share the company's vision for the future. Being a part of a larger goal provides them with a sense of importance attached to their work.
2. **Have Honest Conversation with the Workers** Communication is the key to having a positive employer-employee relationship. When the employers accommodate the tasks of the employees based on their skills and are present for them in times of crisis, it makes them feel safe and confident about their work in the company.
3. **Place your Trust in the Employees** Instead of being aware of every move of your workers, trust them with their work and provide them the liberty to make their decisions. Guide them about what their work is and what is expected of them, to make sure they meet their work objectives.
4. **Invest in Your Workforce** One can express their care for their employees by providing them with the right tools and guidance about their work tasks. The companies can invest in their learning and development departments, employee wellness programs, and mentoring programs to improve the skills of their workers.

Employee Relations Are Important In An Organisation

1. **There are several issues on which an individual cannot take decisions alone** He needs the guidance and advice of others as well. Sometimes we might miss out on important points, but our fellow workers may come out with a brilliant idea which would help us to achieve our targets at a much faster rate.
2. **Work becomes easy if it is shared among all** A healthy relation with your fellow workers would ease the work load on you and in turn increases your productivity. One cannot do everything on his own.
3. **The organization becomes a happy place to work if the employees work together as a family** An individual tends to lose focus and concentration if his mind is always clouded with unnecessary tensions and stress.
4. **An individual feels motivated in the company of others whom he can trust and fall back on whenever needed** One feels secure and confident and thus delivers his best. It is okay if you share your secrets with your colleagues but you should know where to draw the line. A sense of trust is important.
5. **Healthy employee relations also discourage conflicts and fights among individuals.** People tend to adjust more and stop finding faults in each other.

6. **A healthy employee relation reduces the problem of absenteeism at the work place** Individuals are more serious towards their work and feel like coming to office daily. They do not take frequent leaves and start enjoying their work. Employees stop complaining against each other and give their best
7. **It is wise to share a warm relation with your fellow workers, because you never know when you need them** You may need them any time. They would come to your help only when you are nice to them. You might need leaves for some personal reasons; you must have a trusted colleague who can handle the work on your behalf. Moreover healthy employee relations also spread positivity around.



3

[3] Source shows the evolution of the employee past and future



4



5

[4] Source shows differences of employee relations and HR
[5] Shows Top 10 opportunities to improve your employee engagement



6

Significance Of Industrial Relations

1. **It establishes industrial democracy:** Industrial relations means settling employees problems through collective bargaining, mutual cooperation and mutual agreement amongst the parties management and employees unions. This helps in establishing industrial democracy in the organization which motivates them to contribute their best to the growth and prosperity of the organization.
7 **It contributes to economic growth and development:** Good industrial relations lead to increased efficiency and hence higher productivity and income. This will result in economic development of the country.
8 **It improves morale of the work force:** Good industrial relations, built-in mutual cooperation and common agreed approach motivate one to contribute one's best, result in higher productivity and hence income, give more job satisfaction and help improve the morale of the workers.
9 **It ensures optimum use of scare resources:** Good and harmonious industrial relations create a sense of belongingness and group-cohesiveness among workers, and also a congenial environment resulting in less industrial unrest,

grievances and disputes. This will ensure optimum use of resources, both human and materials, eliminating all types of wastage.

10 **It discourages unfair practices on the part of both management and unions:** Industrial relations involve setting up a machinery to solve problems confronted by management and employees through mutual agreement to which both these parties are bound. This results in banning of the unfair practices being used by employers or trade unions.

11 **It prompts enactment of sound labor legislation:** Industrial relations necessitate passing of certain labor laws to protect and promote the welfare of labor and safeguard interests of all the parties against unfair means or practices.

12 **It facilitates change:** Good industrial relations help in improvement of cooperation, team work, performance and productivity and hence in taking full advantages of modern inventions, innovations and other scientific and technological advances. It helps the work force to adjust themselves to change easily and quickly.

Labour Laws

Workmen's Compensation Act, 1923

Workers' compensation is a form of insurance facilitating wage replacement and medical benefits to employees injured in the course of employment in return for mandatory relinquishment of the employee's right to sue his or her employer for the sort of avoidance.

The Factories Act, 1948

The Factories Act 1948 was passed with the intention of protecting the health of workers. It expands the age limits for the medical examination of individuals entering factory employment, while also involving male workers in the regulations for providing seats and issuing extensive new building regulations.

The Payment of Gratuity Act, 1972

It is an Act that ensures a scheme for the payment of gratuity to employees involved in factories, mines, oilfields, plantations, ports, railway companies, shops or other establishments and for matters connected therewith or incidental thereto.

The Payment of Wages Act, 1936

The Payment of Wages Act formulates by when wages shall be distributed to employees by the employers.

The Trade Union Act, 1926

This Act formulated the rules and protections granted to Trade Unions in India. This law was modified in 2001.

The Industrial Disputes Act, 1947

The Industrial Disputes Act 1947 formulates how employers may address industrial issues such as lockouts, layoffs, retrenchment etc. It controls the lawful processes for reconciliation and adjudication of labor conflicts.

Minimum Wages Act, 1948

The Minimum Wages Act states minimum wages in all industries, and in some cases, those working at home per the timetable of the Act. Central and State Governments can and do crosscheck minimum wages at their discretion.

The Payment of Bonus Act, 1965

This Act is applicable to an enterprise employing 20 or more individuals. The Act needs the employer to pay a bonus to individuals on the basis of profits or on the basis of production or productivity.

The Employees' Provident Fund Scheme, 1952

This Act seeks to assure the financial security of the employees in an establishment by facilitating for a system of compulsory savings. The Act provides for constructions of a contributory Provident Fund in which employees' contribution shall be at least equal to the contribution payable by the employer.

The Child Labor (Prohibition & Regulation) Act, 1986

The Child Labor Act, 1986 is one the most regimented acts, as it fights for the rights of children of all sections in India. It dictates where and how children can work and where they cannot.

Maternity Benefit Act, 1961

Maternity Benefit Act formulates the employment of the women and maternity advantages mandated by law. It states the various measures and facilities that every private and public sector company is bound to follow for pregnant women.

SUGGESTIONS

Set the tone from their first day

First impressions matter. Subjecting an excited new employee to endless paperwork and meaningless presentations won't capitalize on their initial enthusiasm. Instead, greet them just as enthusiastically and take the time to personally get them set up for work. Introduce them to their coworkers and even assign a mentor to help them acclimate. Making them feel like they're valued and welcome from the very beginning will set a positive tone that that will remain with them as they learn how they fit into to your company and their new job.

Provide positive feedback

5) Let them know they have value. Believe it or not, employees actually need to hear this on a regular basis. Letting them know when you think they handled a situation well or did a good job in a difficult situation makes them feel like they are an asset to your team.
6) Say thank you. Employees who feel that they have supportive supervisors who recognize the good work they do are 67 percent more engaged than those who

don’t. They are also far more likely to remain with your company. A simple thank-you card or note can make more of a difference than you realize.

7) Publicly recognize high achievers. Praising employees at monthly or weekly meetings for their accomplishments and positive contributions to your company will serve to motivate the ones you recognize and inspire others to work harder.

Improve communication

8) Be visible. Managers and HR representatives should make themselves seen and ensure that employees know they are accessible and approachable. This offers your employees the opportunity to easily seek any guidance or assistance they may need in order to be at their most productive and to deal with any issues or concerns they may have.
9) Have regular company meetings. This gives you a chance to share important information, provide updates, and allow your employees to ask questions.
10) Involve employees in goal-setting. Employees who are involved in setting goals for themselves, their team, and your company will take ownership of those goals and work much harder to meet them.
11) Offer transparency. Employees who feel that their managers are open, honest, and trustworthy, are 94 percent more likely to be happy at work. Transparency also works to create a more cooperative workplace atmosphere.

Offer career development

Companies that take an active role in offering and encouraging career development for their employees will find that they end up with a more motivated and well-equipped workforce. Managers and HR representatives should work closely with employees regarding ways they can improve on their existing skills and get new training. Set up professional development plans. This can help your employees reach their career goals.

Help them be happy

If your employees are happy, they will be more engaged as well as more productive at work. The brain of a person in a positive mood simply performs better than that of an unhappy person. And happy workers are also more creative and better at solving problems. Simply letting your workers know that you care about their happiness is the first step, but you can also take some additional steps to create happier employees.

Conclusion

The reason for the paper is to analyze work relations and HRM and furthermore it will purposely search in to a portion of the issues and difficulties in relations between Labor relations and HRM. Human Resource Management now days become extremely well known in light of the fact that it deal with the laborers in whole way since it is the obligation of HRM director to deal with the human asset in an exceptionally huge way so specialist can ready to keep up with the development of the business. Dealing with

the assorted ability in industry is likewise vital. Since individuals from various information and abilities and different culture and to oversee them in a very well way it is likewise vital as put of the Human Resource the executives. What's more, to close the Labor Relation one might say that, it is essentially known as the Relationship between the business and representatives at work. One might say that in the event that an industry can ready to keep up with the great work connection as modern connection then it would be extremely useful for the development of the business. What's more, on the off chance that it would be not treat as expected or there is an issue with the relations of work then it leads towards the troubles so work connection is likewise basically as significant as Human Resource.

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Chapter 21 : The Role of Artificial Intelligence and Technology in Promoting Peace and Reducing Conflict in Digital Society

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Abstract

Digital society has transformed modern human life through the rapid growth of artificial intelligence (AI), the internet, social media and advanced technologies. People now depend heavily on digital platforms for communication, education, healthcare, business, security and public services. While technology creates many opportunities for development and peaceful governance, it also introduces serious challenges such as cybercrime, misinformation, online harassment, privacy violations and digital inequality. These issues can create conflict, social division and mistrust, making peace in digital society a major concern.This study examines the role of artificial intelligence and technology in promoting peace and reducing conflict in digital society. The main purpose of the study is to identify how AI contributes to peacebuilding through cybersecurity, conflict prevention, digital communication and public safety, while also analyzing how the misuse of technology creates cybercrime and social instability. The study also explores ethical solutions and policy strategies for responsible use of AI and technology.The research uses a qualitative approach with a descriptive research design and mainly depends on secondary data collection. Information was gathered from books, academic journals, research articles, government reports, policy documents and reliable online sources related to AI, digital society, cybercrime and peacebuilding. The collected data was analyzed using thematic analysis to identify major patterns and repeated issues connected to peace and conflict.The findings show that AI can strengthen peace by improving cybersecurity, reducing online threats and supporting better governance. However, cybercrime, fake news, hate speech, privacy violations and the digital divide remain major challenges. The study concludes that ethical AI, strong digital governance, public awareness and equal access to technology are essential for building a safer, fairer and more peaceful digital society.

Keywords: Artificial Intelligence, Digital Society, Technology, Peace, Conflict

Introduction

Digital society has become an important part of modern human life. People now depend heavily on technology, the internet, social media and artificial intelligence (AI) for communication, education, business, healthcare, security and daily decision-making. Technology has changed the way people live, work and interacts with each other. From smartphones and online learning platforms to AI-powered systems and digital banking, modern society is becoming more connected through digital tools. This rapid digital transformation has created many opportunities for development, but it has also introduced new challenges related to peace, security and social conflict. Artificial Intelligence (AI) is one of the most powerful technological developments in the digital age. AI refers to computer systems that can perform tasks that normally require human intelligence, such as learning, problem-solving, decision-making, speech recognition and data analysis. AI is used in many areas such as healthcare, education, law enforcement, customer service and social media management. For example, AI helps hospitals detect diseases faster, supports students through smart learning systems and assists governments in monitoring public safety. These advancements show how AI can contribute positively to social development and peaceful governance.

However, digital society also creates serious risks and conflicts. Social media platforms can spread false information, hate speech, cyber bullying, online fraud and digital harassment. Cybercrime such as hacking, identity theft, financial scams and data breaches has become a major concern for individuals and governments. AI technologies can also be misused for surveillance abuse, spreading fake news and manipulating public opinion. In some cases, technology increases social division instead of promoting unity. When digital tools are used irresponsibly, they can create mistrust, fear and conflict among people and institutions. Peace in digital society does not only mean the absence of violence but also the presence of fairness, trust, security and responsible digital behavior. Technology and AI can support peace by improving communication, solving conflicts, protecting human rights and preventing cybercrime. For example, AI can help detect online threats, monitor harmful content and support conflict resolution through better decision-making systems. Digital education and ethical technology use can also help create safer and more respectful online communities.

At the same time, ethical concerns about AI must be considered. Issues such as privacy violations, algorithm bias, lack of transparency and unequal access to technology can create injustice and social tension. If AI systems are not fair and accountable, they may increase discrimination instead of reducing conflict. Therefore, responsible governance, digital ethics and strong public policies are necessary to ensure that

technology serves human well-being and social harmony.This study focuses on the role of artificial intelligence and technology in promoting peace and reducing conflict in digital society. It aims to examine how digital technologies influence social relationships, security and conflict management, while also identifying the risks and ethical challenges connected to AI. Understanding this relationship is important for building and more peaceful digital future where technology supports human dignity, justice and sustainable development.

Research Problem

Digital society has changed the way people communicate, work, learn and solve problems. Technology and artificial intelligence (AI) have become important tools in daily life, helping people in areas such as education, healthcare, business, security and public services. AI can improve decision-making, detect cyber threats, support law enforcement and help governments manage social issues more effectively. These developments show that technology has the potential to promote peace, improve social harmony and reduce different forms of conflict in society.

However, the rapid growth of digital technology has also created serious challenges. Social media platforms often become spaces for misinformation, hate speech, cyber bullying, online harassment and the spread of social division. Cybercrime such as hacking, identity theft, online fraud and data breaches threatens both individuals and institutions. AI systems can also be misused for surveillance abuse, fake news creation, manipulation of public opinion and unfair decision-making. Instead of promoting peace, technology can sometimes increase fear, mistrust, discrimination and conflict. Another major issue is the ethical concern surrounding AI and digital governance. Problems such as privacy violations, algorithm bias, lack of transparency and unequal access to technology can create social injustice. Some people benefit greatly from digital transformation, while others are left behind because of poverty, lack of education, or limited digital access. This digital divide creates inequality and weakens social peace. Without proper laws, ethical standards and responsible leadership, technology may become a source of conflict rather than a tool for peace.

Therefore, the main research problem of this study is to understand how artificial intelligence and technology influence peace and conflict in digital society. The study seeks to examine both the positive role of AI in promoting peaceful governance and the negative effects of digital misuse that create cybercrime, conflict and social instability. It also aims to identify practical strategies for using technology responsibly to support peace, justice and sustainable development in modern digital society. The first objective of this study is to identify the major ways artificial intelligence and technology contributes to promoting peace and reducing conflict in digital society. This

includes examining how AI supports cyber security, online safety, conflict resolution, digital communication and public service management. Understanding these positive contributions helps explain how technology can create safer and more peaceful communities. The second objective is to examine the major digital conflicts and cybercrimes created by the misuse of technology and AI. This includes studying issues such as cyber bullying, hate speech, misinformation, online fraud, hacking, privacy violations and digital harassment. This objective helps to understand how irresponsible use of technology can damage trust, increase social tension and threaten peace.The third objective is to explore ethical solutions and policy strategies for using AI and technology responsibly in digital society. This includes analyzing the importance of digital ethics, strong legal protection, responsible governance, public awareness and equal access to technology. The purpose is to identify practical ways to ensure that AI and technology support fairness, human rights and peaceful social development.

Literature Review

1. Introduction to Digital Society

Digital society refers to a modern social environment where people depend heavily on digital technology, the internet, social media and artificial intelligence (AI) in their daily lives. Communication, education, business, healthcare, banking, entertainment and even government services are now strongly connected to digital systems. People use smartphones, computers and online platforms not only for personal activities but also for professional and social interactions. This digital transformation has made life faster, easier and more connected across the world.Researchers explain that digital society creates new opportunities for development, innovation and global communication. For example, online education allows students to learn from anywhere, digital banking improves financial access and social media helps people connect across countries. Governments also use digital systems for public services, security monitoring and policy management. These changes show that technology has become a central part of modern social life.However, digital society also creates new social risks. Problems such as cybercrime, fake news, online harassment, privacy violations and digital inequality are becoming serious concerns. Not everyone has equal access to technology, which creates a digital divide between rich and poor communities. This can increase social inequality and conflict. Therefore, understanding digital society is important for promoting peace and justice in the modern world.

2. Artificial Intelligence and Its Role in Society

Artificial Intelligence (AI) refers to computer systems that can perform tasks that normally require human intelligence. These tasks include learning, decision-making,

language understanding, problem-solving and recognizing patterns. AI is used in many sectors such as healthcare, education, transportation, business, law enforcement and social media. In healthcare, AI helps doctors detect diseases faster and improve treatment planning. In education, AI-powered learning systems provide personalized support for students. In business, AI improves customer service, marketing and financial management. Governments use AI for traffic control, crime prevention and public administration. These examples show how AI can improve efficiency and support social development. Many scholars believe AI can also support peace by helping identify conflicts early, improving crisis response and strengthening cyber security. For example, AI can detect harmful online content, monitor cyber threats and support decision-making during emergencies. However, AI must be used carefully because it also carries risks such as bias, surveillance abuse and privacy violations.

3. Technology and Peace building in Digital Society

Peace building in digital society means using technology to reduce conflict, improve communication and create safer and more respectful communities. Technology can help people solve problems peacefully by increasing access to information, supporting dialogue and improving social understanding. Social media, online education and digital communication tools can connect people from different backgrounds and reduce misunderstandings.AI and digital platforms also help in conflict prevention and crisis management. Governments and organizations use technology to monitor public safety, detect early signs of violence and respond quickly to emergencies. For example, AI systems can identify hate speech or dangerous online behavior before it becomes a larger conflict. Digital reporting systems also allow people to report crimes and abuse more easily. Researchers explain that technology can strengthen democratic participation and social trust when used responsibly. Online public services, digital transparency and citizen participation platforms improve accountability and reduce corruption. This supports peaceful governance and stronger relationships between citizens and institutions.

4. Cybercrime and Digital Conflict

Cybercrime is one of the biggest threats in digital society. It includes hacking, identity theft, online fraud, financial scams, data breaches, cyber bullying and online harassment. These crimes affect individuals, businesses and governments. Cybercrime creates fear, financial loss, emotional stress and mistrust in digital systems. Social media has also become a major source of digital conflict. Misinformation, fake news, hate speech and harmful online content can spread quickly and create social division. False information during elections, health crises, or political conflicts can lead to violence and public panic. Online bullying and harassment also affect mental health,

especially among young people. Researchers highlight that digital conflict is not always physical but can still damage peace and social stability. Cyber attacks against government systems or public services can create national security risks. Therefore, controlling cybercrime is necessary for maintaining peace in digital society.

5. Ethical Issues of Artificial Intelligence

Although AI offers many benefits, it also creates serious ethical concerns. One major issue is privacy. Many AI systems collect and analyze large amounts of personal data and this can lead to misuse of private information. Without proper protection, people may lose control over their personal lives and digital identity.Another major issue is algorithm bias. AI systems are created using data and if the data is unfair or incomplete, the system may make biased decisions. For example, AI used in hiring, policing, or loan approval may treat certain groups unfairly based on gender, race, or social background. This creates discrimination instead of justice.Lack of transparency is another challenge. Many people do not understand how AI systems make decisions. If decisions are not clear or accountable, trust in technology becomes weak. Scholars argue that ethical AI requires fairness, responsibility, human control and strong legal standards to protect human rights and social justice.

6. Digital Divide and Social Inequality

The digital divide means the gap between people who have access to technology and those who do not. In many developing countries, poor families, rural communities and low-income groups have limited access to internet services, computers and digital education. This creates inequality in learning, employment and social participation.During events like the COVID-19 pandemic, digital inequality became more visible. Students without internet access could not continue online learning and workers without digital skills faced unemployment. This shows that technology can increase inequality if access is not fair.Researchers explain that equal access to technology is important for social justice and peace. Governments must provide affordable internet, digital education and support for vulnerable groups. Without digital inclusion, technology may benefit only a small group of people while leaving others behind.

7. Government Policies and Digital Governance

Strong government policies are necessary to manage technology responsibly and reduce digital conflict. Digital governance means creating laws, regulations and ethical standards for the safe use of AI and technology. Governments must protect citizens from cybercrime, data misuse and digital exploitation. Cyber security laws help

prevent hacking, fraud and privacy violations. Laws against online hate speech, cyber bullying and misinformation also protect public peace. Governments should ensure that AI systems are transparent, fair and accountable. Public institutions must use technology in ways that respect human rights and social equality. Researchers also highlight the importance of digital literacy and public awareness. People need education about online safety, responsible technology use and digital ethics. Peace in digital society depends not only on laws but also on public responsibility and ethical behavior. The literature shows that artificial intelligence and technology have both positive and negative effects on peace and conflict in digital society. Technology can improve communication, support public services, strengthen cyber security and help prevent social conflict. At the same time, cybercrime, misinformation, privacy violations and digital inequality create serious risks for social stability and justice.AI can be a powerful tool for peace building when it is used responsibly, fairly and ethically. Strong government policies, digital education, equal access to technology and public awareness are necessary for reducing digital conflict and promoting peaceful development. Understanding the relationship between AI, technology, peace and conflict is essential for building a safer and more inclusive digital future.

Methodology

This study uses a qualitative research approach to examine the role of artificial intelligence (AI) and technology in promoting peace and reducing conflict in digital society. A qualitative method is suitable for this research because it helps the researcher understand social issues in depth by focusing on human experiences, social behavior, ethical concerns and institutional challenges rather than only depending on numbers and statistics. Since digital society involves complex issues such as cybercrime, misinformation, privacy, online conflict and peaceful governance, qualitative research provides a better understanding of these realities and their impact on society. The research mainly depends on secondary data collection. Secondary data refers to information that has already been collected and published by other researchers, institutions and organizations. The sources used in this study include books, academic journals, research articles, government reports, policy documents, conference papers and reliable online publications related to digital society, artificial intelligence, cybercrime, peace building and conflict resolution. Reports from international organizations such as the United Nations, World Bank, UNESCO and cyber security institutions are also important sources of information for this study. These materials provide strong background knowledge and reliable evidence for analyzing the relationship between AI, technology, peace and conflict.

A descriptive research design is used in this study to explain the current situation of digital society and how technology influences peace and conflict. Descriptive research

helps the researcher clearly present how AI supports cyber security, public safety, digital communication and conflict prevention, while also explaining how the misuse of technology leads to cybercrime, misinformation, hate speech and social instability. This design allows the study to describe real social conditions and understand both the positive and negative effects of technology in modern society. The sampling method used in this research is purposive sampling. This means the researcher selects specific information sources that are directly relevant to the research topic and useful for answering the research questions. For example, studies related to AI ethics, cybercrime prevention, digital peace building, social media conflict, online harassment and technology governance are selected because they provide meaningful evidence for the study. The purpose is to focus on high-quality and relevant information rather than collecting a large amount of unrelated data. Data analysis is conducted using thematic analysis. In this method, the researcher carefully reads and examines the collected information to identify common themes, patterns and repeated ideas. Themes such as cyber security, misinformation, digital conflict, AI ethics, privacy issues, digital inclusion and policy solutions are grouped and analyzed to understand how they are connected to peace and conflict in digital society. This helps organize the findings clearly and allows the researcher to explain the issue in a logical and academic manner.

Ethical considerations are also important in this study. Since the research uses published secondary data, proper attention is given to honesty, accuracy and correct citation of all sources. The researcher avoids plagiarism by giving full credit to original authors and institutions. Only reliable and trustworthy information is selected to maintain the quality of the study. Respect for academic integrity and responsible use of information is necessary to ensure the credibility of the research. This methodology helps the study achieve its main goal of understanding how AI and technology influence peace and conflict in digital society. By using qualitative analysis and reliable secondary sources, the research provides a strong foundation for discussing digital challenges and recommending practical solutions for building a safer, fairer and more peaceful digital future.

Data Analysis

The data analysis for this study is carried out using thematic analysis, which is a qualitative method used to identify, examine and interpret common patterns and themes within the collected information. Since this research focuses on the role of artificial intelligence (AI) and technology in promoting peace and reducing conflict in digital society, thematic analysis is suitable because it helps the researcher understand complex social issues in a deeper and more meaningful way rather than depending only on numerical data. It allows the study to explore digital behavior, ethical concerns, cyber risks and the social impact of technology on peace and conflict.

The first step in data analysis is collecting and reviewing secondary data from books, academic journals, research articles, government publications, policy reports, conference papers and reliable online sources related to AI, digital society, cybercrime, conflict resolution and peace building. These sources provide important information about cyber security, misinformation, hate speech, cyber bullying, online fraud, privacy violations and the positive role of AI in conflict prevention and peaceful governance. The researcher carefully reads and examines these materials to gain a full understanding of the research topic. The second step is organizing the collected information into major themes and sub-themes. For example, cybercrime, hacking and online fraud are grouped under digital security threats, while misinformation, fake news and hate speech are grouped under social media conflict. Privacy issues, surveillance abuse and algorithm bias are grouped under AI ethical concerns. Positive uses of AI such as cyber security, public safety, digital education and conflict prevention are grouped under peace building through technology. This thematic grouping helps the researcher clearly understand how different digital issues are connected to peace and conflict.

The third step involves interpreting the findings by comparing different studies and identifying repeated problems, common solutions and major arguments presented by previous researchers. This helps the researcher understand how technology can either reduce conflict or create new forms of social tension depending on how it is used. It also helps identify which government policies, digital ethics and public awareness strategies are most effective in promoting responsible use of AI and technology. Finally, the analyzed data is presented in a clear and descriptive form to support the research objectives. The findings are explained using simple academic language so that readers can easily understand the impact of AI and technology on digital peace and conflict. Through this process, the study provides strong evidence on how responsible technology use, ethical AI systems and effective digital governance can help create a safer, fairer and more peaceful digital society.

Findings of the Study

The findings of this study show that artificial intelligence (AI) and technology play a major role in both promoting peace and creating conflict in digital society. Technology has become a powerful part of modern life, affecting communication, education, business, security, healthcare and government services. While digital tools create many opportunities for social development and peaceful governance, their misuse also creates serious risks such as cybercrime, misinformation, privacy violations and social division. The study confirms that technology can either support peace or increase conflict depending on how it is managed and used. One major finding is that AI has a strong positive role in improving cyber security and public safety. AI systems help

detect cyber threats such as hacking, online fraud, identity theft and suspicious digital activities more quickly than traditional methods. Governments, banks and businesses use AI to protect sensitive information and prevent financial crimes. For example, AI-powered security systems can identify unusual online behavior and stop cyber-attacks before serious damage occurs. This helps build trust in digital systems and supports peace by reducing fear and insecurity in online environments.

Another important finding is that AI improves communication and conflict prevention in digital society. Social media monitoring tools and digital reporting systems help identify harmful online behavior such as hate speech, cyber bullying and threats of violence. AI can support early warning systems by detecting signs of social unrest or online conflict before they become larger problems. This allows governments and organizations to respond quickly and reduce the risk of violence. Technology also helps people from different backgrounds communicate more easily, which can reduce misunderstandings and strengthen social harmony. However, the study found that the misuse of technology creates serious digital conflicts. Social media platforms often become spaces for misinformation, fake news and online harassment and hate speech. False information spreads quickly and can create public panic, political tension and social division. For example, fake news during elections or public health emergencies can influence people's decisions and create distrust toward institutions. Cyber bullying and online harassment also cause emotional harm, especially among young people and affect mental well-being and social peace.

Cybercrime was identified as one of the most serious threats in digital society. Hacking, financial scams, identity theft and data breaches create fear, financial loss and mistrust in digital platforms. Individuals and organizations suffer serious damage when private information is stolen or misused. The study found that cybercrime weakens confidence in technology and creates barriers to peaceful digital development. Strong cyber security systems and legal protection are necessary to reduce these risks. Another key finding is that ethical issues related to AI create social tension and inequality. Privacy violations are a major concern because many AI systems collect and analyze personal data without clear consent. People may feel unsafe when surveillance technologies are used without transparency. Algorithm bias is another serious issue. If AI systems are built using unfair or incomplete data, they may make discriminatory decisions in areas such as hiring, policing, education and financial services. This creates injustice instead of fairness and can increase social conflict.

The study also found that the digital divide increases inequality in society. Not everyone has equal access to internet services, digital education and modern technology. Poor families, rural communities and low-income groups often face difficulties in using digital tools for learning, employment and public services. During

online education or digital government programs, people without internet access are left behind. This creates frustration and social exclusion, showing that technology alone cannot create peace unless access is fair and inclusive. Weak digital governance and poor legal protection were also identified as major problems. In some countries, laws related to cybercrime, data protection and AI ethics are still weak or not properly enforced. This allows digital abuse to continue without accountability. Corruption, lack of transparency and poor leadership make it difficult to use technology responsibly for public benefit. The study found that strong government policies and responsible digital governance are necessary for protecting human rights and maintaining peace in digital society.

Finally, the study found that public awareness and digital responsibility are essential for long-term peace. Technology users must understand online safety, digital ethics and respectful communication. Schools, media and communities play an important role in teaching people how to use technology responsibly. Peace in digital society depends not only on advanced technology but also on human values such as honesty, fairness, respect and responsibility. Overall, the findings confirm that AI and technology are powerful tools that can either reduce conflict or create new forms of social problems. Their impact depends on ethical use, strong laws, equal access and responsible leadership. When technology is managed fairly and responsibly, it can support justice, trust and peaceful social development. These findings strongly support the need for balanced digital policies and ethical AI systems to build a safer and more peaceful digital future.

Recommendations

Based on the findings of this study, several recommendations can be made to ensure that artificial intelligence (AI) and technology are used to promote peace and reduce conflict in digital society. These recommendations focus on strengthening digital security, improving ethical technology use, protecting human rights and creating a safer and more inclusive digital environment for all people. The first recommendation is to strengthen cyber security systems and legal protection against cybercrime. Governments, businesses and public institutions should invest in advanced cyber security tools to prevent hacking, online fraud, identity theft and data breaches. Strong laws must be introduced and properly enforced to punish cybercriminals and protect digital users. Special attention should be given to online financial security, personal data protection and safe digital communication. A secure digital environment helps build trust and reduces fear and conflict in society.

The second recommendation is to promote ethical use of artificial intelligence and responsible digital governance. AI systems should be designed with fairness,

transparency and accountability. Governments and technology companies must ensure that AI does not create discrimination through algorithm bias or misuse personal data through privacy violations. Clear ethical guidelines and public policies should be developed to regulate the use of AI in areas such as education, law enforcement, healthcare and employment. Responsible AI helps protect human rights and supports peaceful governance. Another important recommendation is to improve digital literacy and public awareness. Many digital conflicts happen because people do not fully understand how to use technology safely and responsibly. Schools, universities, media and community organizations should provide education about cyber safety, online ethics, misinformation and respectful communication on social media. People should learn how to identify fake news, protect personal information and avoid harmful online behavior such as cyber bullying and hate speech. Public awareness is a key step in reducing digital conflict.

The study also recommends reducing the digital divide by ensuring equal access to technology for all citizens. Poor families, rural communities and low-income groups should have better access to affordable internet services, digital devices and online education opportunities. Governments should support digital inclusion programs, especially for students, women, elderly people and people with disabilities. Technology should not become a privilege for only a small group of people. Equal digital access is necessary for social justice and peaceful development. Strong government policies and responsible leadership are also necessary for managing digital society effectively. Governments should create clear laws for data protection, cybercrime prevention, online harassment and social media regulation. Public institutions must use digital tools in transparent and fair ways that respect citizens' rights. Corruption and misuse of surveillance technology should be prevented through accountability and public monitoring. Good governance creates trust and strengthens peace in digital society. Another recommendation is to encourage the use of technology for peace building and conflict resolution. AI can be used to monitor harmful online behavior, detect early signs of violence and support emergency responses during social crises. Digital platforms can also be used for dialogue, education and community cooperation between different social groups. Governments and organizations should use technology not only for control but also for promoting understanding, inclusion and social harmony.

Finally, future research should continue to study the relationship between AI, technology, peace and conflict in different social and cultural contexts. As technology changes rapidly, new digital risks and opportunities continue to appear. More research can help identify better strategies for creating safe and ethical digital environments. Continuous academic attention is important for developing stronger policies and long-term solutions. Technology and AI can become powerful tools for peace when

they are used responsibly, fairly and ethically. Strong cyber security, digital education, equal access, ethical governance and public awareness are essential for reducing digital conflict and promoting peaceful development. By following these recommendations, societies can build a safer, more just and more inclusive digital future for present and future generations.

Significance of the Study

This study is important because artificial intelligence (AI) and technology have become a major part of modern digital society, influencing communication, education, business, healthcare, security and public services. As people depend more on digital systems in daily life, understanding how technology affects peace and conflict becomes highly necessary. This research helps explain how AI can be used positively to improve cyber security, reduce online conflict, support conflict resolution and strengthen peaceful governance. At the same time, it also examines how the misuse of technology can create cybercrime, misinformation, hate speech, privacy violations and social division.

The study is significant for governments, policymakers, educators and technology developers because it provides useful knowledge for creating stronger digital policies, ethical AI systems and safer online environments. It highlights the importance of responsible governance, digital literacy and equal access to technology in reducing conflict and promoting social justice. The research is also valuable for students and future researchers as it adds academic knowledge to the areas of digital society, peace studies and conflict resolution. In addition, this study helps raise public awareness about the importance of using technology responsibly and ethically. It encourages people to understand that peace in digital society depends not only on advanced technology but also on human values such as fairness, respect, accountability and inclusion. Therefore, the study contributes to building a safer, more just and more peaceful digital future where technology supports human dignity and sustainable social development.

Ethical Considerations

Ethical considerations are very important in this study because they help maintain honesty, fairness and academic integrity throughout the research process. Since this study focuses on artificial intelligence (AI), technology, peace and conflict in digital society, it is necessary to handle information responsibly and carefully. Ethical research ensures that the study is reliable, trustworthy and respectful to all individuals and social groups affected by digital issues. This research mainly uses secondary data such as books, academic journals, research articles, government reports, policy documents and

reliable online sources. Therefore, proper citation and referencing are necessary to give full credit to the original authors and institutions. The researcher avoids plagiarism by clearly acknowledging all sources used in the study. Academic honesty is essential to maintain the quality and credibility of the research. The researcher also ensures that only reliable, accurate and relevant information is selected for analysis. False or biased information can create misunderstanding, especially in topics related to cybercrime, AI ethics and digital conflict. Care is taken to avoid harmful language, unfair judgments, or discrimination when discussing sensitive issues such as privacy violations, cyber bullying, hate speech and social inequality. Objectivity is another important ethical principle in this study. The researcher remains neutral and avoids personal bias while analyzing the role of AI and technology in society. The findings and conclusions are based on evidence and facts rather than personal opinions. This helps ensure that the research remains balanced, professional and useful for understanding peace and conflict in digital society.

Limitations of the Study

This study has several limitations that may affect the depth and scope of the research findings. Understanding these limitations is important because it helps explain the boundaries of the study and provides guidance for future research. Although the study provides useful knowledge about the role of artificial intelligence (AI) and technology in promoting peace and reducing conflict in digital society, certain challenges were present during the research process. The first limitation is that the study mainly depends on secondary data. The research is based on books, academic journals, research articles, government reports, policy documents and reliable online sources rather than primary data collected directly through interviews, surveys, or field observations. While secondary data provides strong background knowledge, it may not fully reflect the real-life experiences of individuals affected by cybercrime, online conflict, or digital inequality. Primary data could provide deeper practical understanding.

The second limitation is the broad nature of the topic. Digital society, AI, peace and conflict are very wide areas that include many issues such as cyber security, misinformation, cybercrime, privacy, digital ethics and governance. Due to time and resource limitations, the study could not examine every aspect in full detail. Instead, it focused mainly on major issues related to AI, technology and digital peace building. Another limitation is that technology changes very quickly. New digital platforms, AI tools and cyber threats continue to develop rapidly. Information that is relevant today may change in a short period of time. This makes it difficult for the study to remain fully updated with the latest technological developments and digital security challenges. The study also faces limitations related to differences between countries

and societies. Digital access, government policies, legal systems and cultural attitudes toward technology are different in each country. Therefore, some findings and recommendations may not apply equally to all social and political contexts. Local studies are needed for more specific understanding and policy solutions.

Researcher bias can also be considered a limitation in qualitative studies. Since thematic analysis involves interpretation of collected information, personal understanding may influence how data is selected and explained. Although efforts were made to remain objective and use reliable sources, complete removal of subjective judgment is difficult in social research. Finally, limited time and financial resources reduced the possibility of conducting a larger field-based investigation. A broader study involving interviews with experts, technology users and victims of cybercrime would require more time and support. Because of these limitations, the research mainly focuses on theoretical understanding and policy discussion rather than large-scale field evidence. Despite these limitations, the study still provides valuable insights into how AI and technology affect peace and conflict in digital society. It offers useful understanding of the risks, opportunities and solutions for building a safer, fairer and more peaceful digital future.

Conclusion

Artificial intelligence (AI) and technology have become powerful forces in modern digital society, influencing communication, education, healthcare, business, security and public services. They have created many opportunities for social development, faster communication and better decision-making. At the same time, they have also introduced serious challenges such as cybercrime, misinformation, privacy violations, online harassment and digital inequality. This study shows that technology can either promote peace or create conflict depending on how it is used and managed.The research found that AI plays an important role in supporting peace through cybersecurity, conflict prevention, public safety and better governance. AI systems help detect cyber threats, monitor harmful online behavior and improve access to digital services. These benefits can strengthen trust, reduce fear and create safer online environments. Technology also supports communication and understanding between people, which helps reduce misunderstandings and social tension.However, the misuse of technology creates serious risks for peace and social stability. Cybercrime, fake news, hate speech, cyberbullying and unfair use of AI systems can increase conflict and weaken trust in institutions. Ethical issues such as privacy violations, surveillance abuse and algorithm bias also create injustice and discrimination. In addition, the digital divide leaves poor and rural communities with limited access to technology, increasing inequality and social exclusion.The study highlights that strong government policies, ethical AI systems, digital literacy and equal access to technology are

necessary for reducing conflict and promoting peace in digital society. Responsible leadership and public awareness are also important to ensure that technology serves human well-being rather than causing harm. Peace in digital society depends not only on advanced technology but also on fairness, accountability and respect for human rights.AI and technology should be used as tools for justice, inclusion and peaceful development rather than sources of fear and division. A safe and peaceful digital future can only be achieved when technology is managed responsibly, ethically and equally for all members of society. Governments, institutions and individuals must work together to ensure that digital progress supports human dignity, social harmony and sustainable development.

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Chapter 22 :The impact of the COVID-19 pandemic on the Sri Lankan tourism hotel industry(with special reference to tourism hotels in the Galle district)

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Abstract
Inbound and outbound tourism constitute the two primary segments of the tourism sector. While domestic tourism often exceeds international tourism in scale, there remains a notable lack of comprehensive data on the local tourism industry. The COVID-19 pandemic emerged as a global crisis, profoundly affecting all aspects of economic and social life. This study examines the impact of the pandemic on the hotel sector in Sri Lanka, with particular reference to tourist hotels in the Galle District, and explores hoteliers' perceptions of post-pandemic recovery strategies. A mixed-methods approach was adopted, integrating both qualitative and quantitative data, alongside secondary sources. Primary data were collected through an online survey administered to fifteen randomly selected hotels in the Galle District. Additionally, questionnaires were distributed to forty staff members across these hotels. Both open-ended and closed-ended questions were utilized, and in-depth interviews with tourism industry experts provided further qualitative insights. The findings reveal that the COVID-19 pandemic led to the closure of numerous tourist hotels and widespread reservation cancellations, severely disrupting revenue streams. Consequently, many hotels faced difficulties in meeting employee salary obligations. Despite these challenges, the hotel sector is expected to play a crucial role in revitalizing the tourism industry in the post-pandemic period. However, hoteliers anticipate that full recovery will take several years under current conditions. The study recommends the implementation of both short-term and long-term sustainable marketing strategies, alongside strict adherence to health and safety regulations. Furthermore, it emphasizes the importance of aligning with post-COVID-19 tourism development strategies as advised by industry experts to ensure resilience and sustainable growth.

Keywords: Covid-19 pandemic, health regulations, tourists, Hotel industry, Galle District

1. Introduction

1.1 Overview of the tourism industry

As a growing and dynamic sector, the tourism sector plays a critical role in generating employment opportunities, the growth of the economy, and generating foreign exchange earnings in the global economy. On the other hand, the tourism sector has significantly contributed to the development of sub-sectors such as retail services, the transportation sector, and accommodation over the past decades. The United Nations World Tourism Organization (UNWTO) reports that 1.5 billion foreign visitors arrived in 2019, indicating a steady increase in the demand for travel worldwide (United Nations World Tourism Organization [UNWTO], 2020). Globalization, technical developments, better transportation infrastructure, and more disposable incomes have all contributed to this expansion by making travel more accessible and inexpensive for a greater portion of the world's population.

1.2 Vulnerability of Tourism to External Shock

The tourism sector is intrinsically susceptible to outside shocks, notwithstanding its quick expansion and economic importance (Pizam & Ellis, 1999). Natural catastrophes, political unrest, terrorism, and health crises are examples of events that have historically hampered tourism and had a detrimental effect on the sector. Because they are so common and unpredictable, health-related emergencies have proven to be especially difficult. The COVID-19 epidemic that broke out in late 2019 caused one of the biggest disruptions to the travel and tourism industry in history. The virus, which started in Wuhan, China, quickly spread throughout the world, forcing governments to impose stringent containment measures such as border closures, travel restrictions, and quarantine laws (World Health Organization [WHO], 2020). Although these actions were required to stop the virus's spread, they had a disastrous effect on travel and tourism worldwide.

1.3 Global Impact of COVID-19 on Tourism

Global tourism significantly decreased as a result of the COVID-19 epidemic. International visitor numbers fell by 58% to 78% in 2020, leading to significant economic losses (UNWTO, 2020). Reduced demand, canceled reservations, and operational disruptions had a negative impact on the hospitality industry, especially hotels.

1.4 Impact of the Hotel Industry

By offering lodging and necessary services, the hotel industry contributes significantly to the tourism industry. The hotel industry faced a significant operational challenge during the period of the COVID-19 pandemic since it negatively affected visitors' arrival to the country, and this resulted in declining occupancy rates, a decrease in income flows, and business challenges.

1.5 Galle District as the Study Area

As an important tourism destination in Sri Lanka, the Galle district in the Southern province has well-established historical value, attractive seaside locations, and a developing hospitality sector. Due to the travel restrictions and minimal tourist arrivals, the demand for the hotel sector declined significantly during the pandemic, and this impacted both small-scale and major business organizations. At the same time, the hotel sector in the Galle district is also faced with significant challenges when dealing with managing staff, stable financial systems, and operational sustainability.

1.6 Adoption and Changing Consumer Behavior

In order to deal with the negative outcomes of the COVID-19 pandemic, the hotel sector has implemented new operational strategies to retain employees and tourists within the industry. Due to the pandemic, currently the hotel sector operations largely depend on hygiene procedures, which give focus on hygiene and protective measures such as increased cleanliness, rules in social distancing, and training employees to deal with these situations. These activities are aimed at increasing customer trust in their customer base; however, these processes will result in higher operational expenditures, and they will change the way that they provide their service to the customers. Due to the pandemic, travelers gave priority to health and safety practices and flexibility when they selected travel destinations (Sigala, 2020).

1.7 Problem Statement

The COVID-19 pandemic created severe operational and financial disruptions within the tourism industry (UNWTO, 2020). This negative situation in the hotel sector worsened following the 2019 Easter Sunday attack in Sri Lanka, which resulted in a crisis situation in the tourism sector. Despite the hotel industry's significance to the country's economy, little research has been done on the pandemic's precise effects at the regional level. Specifically, not enough research has been done on the Galle District, a major tourist destination. Additionally, operational difficulties and employee experiences receive less attention in current research, which mostly concentrates on economic effects. The lack of a thorough and localized understanding of COVID-19 effects on the Galle District's tourism hotel sector is thus addressed by this study.

1.8 Research Question

1. How has the COVID-19 outbreak affected hotel occupancy and visitor arrivals in the Galle District?
2. What effects has the COVID-19 pandemic had on tourist hotels' operational and financial performance?
3. What are the main obstacles that hotel staff had to deal with throughout the pandemic?
4. What tactics has hotel management used to deal with COVID-19's effects?
5. What elements affect the Galle District's hotel industry's resilience and recuperation?

1.9 Research Objectives

Main objective

1. To examine how the COVID-19 outbreak has affected Sri Lanka's Galle District's tourism hotel sector.

Specific objective

1. To investigate how COVID-19 affects hotel occupancy rates and visitor arrivals.
2. To examine the operational and financial difficulties hotels encountered during the pandemic.
3. To evaluate how COVID-19 has affected hotel workers' earnings and job security.
4. To determine the crisis management tactics used by hotel management.
5. To investigate elements that help the hotel business recover and be resilient.

1.10 Significance of the Study

The research is critical since it provides guidance on the effect of the COVID-19 pandemic on the tourism sector in the Galle district in Sri Lanka. Also, this study provides guidance on recovery planning, how to deal with tourists in a crisis, and how to deal with issues that arise due to health emergencies in the hotel sector. This study will also help decision-makers effectively deal with crises by designing recovery procedures and policies for the tourism industry. Altogether, this research gives knowledge on how crises can be dealt with, how they can be adjusted, and how to get back to the same situation for the hotel sector.

2 Literature review

2.1 Tourism Crisis and Vulnerability

The tourism sector is severely affected by external shocks such as political changes, natural disasters, and health issues. According to the findings by Pizam & Ellis (1999), tourist demand is affected by perceived risk and an uncertain environment. Thus, crises may significantly affect tourism operations and reduce travel demand.

2.2 Impact of COVID-19 on Global Tourism

The COVID-19 pandemic that emerged in late 2019 significantly reduced international movements, and restrictions on travel, quarantine procedures, and border closures also occurred. Thus, as per the United Nations World Tourism Organization (2020), the foreign arrival rate decreased by 78% in 2020, and this represented one of the largest declines in international travel in tourist history. Therefore, this failure directly affected hotels in the hospitality industry in the world, resulting in huge financial losses.

2.3 Hotel Industry and Crisis Response

The hotel industry is severely vulnerable to crisis due to tourists' mobility and needs. Because of the COVID-19 pandemic, the hotel sector organizations face losses in their revenue generation streams, service disruptions, and brief closures (Gössling et al., 2020). Through safety procedures, reducing costs, and innovative offers, hotels respond to the crisis situation.

2.4 Tourism Resilience and Recovery

The resilience is known as people's, institutions', and systems' capacity to withstand shocks and recover. As per Hall, Scott, and Gössling (2020), tourism resilience implies both recovery and transformation processes, which involve organizations adapting to new circumstances and creating long-term sustainability. If the hotels are effectively focusing on expanding their offerings, focusing on local markets, and implementing new digital technology, they could face the crisis situation effectively.

2.5 Health, Safety, and Consumer Behavior

It changed the traveler's behavior due to the COVID-19 pandemic, and they are increasingly focused on hygiene and protection concerns. When travelers make decisions on travel destinations, they are increasingly focused on hygiene needs, safety processes, and different booking alternative which are flexible to them (Sigala, 2020). Therefore, the organizations in the hotel sector are modifying their operating activities in order to satisfy customers' needs and wants.

2.6 Sri Lankan Context and Industry Challenges

Following the end of Sri Lanka's civil war in 2009, the tourism sector was expanded and developed with the natural environment and cultural heritage. The Easter Sunday attack and the COVID-19 pandemic significantly compounded the growth of the industry, showing a huge decline in tourist arrivals and demand for lodging. Due to these crises, there was a decrease in occupancy rates, a decrease in revenue streams, and disruption of operational processes as the major circumstances faced by the hotel industry, and further, these issues contributed to short-term closures and financial instability. Further, the crisis created the risk of job losses, reducing payments, which negatively affected employees working in hotels.

2.7 Conclusion of Literature Review

The literature review demonstrated the effect of the COVID-19 pandemic on the travel and tourism industry, indicating negative outcomes such as a decrease in visitors, profit losses, and operational disruptions. Further, Sigala (2020) indicated changes in consumer behavior due to the pandemic, and Gössling et al. (2020) demonstrated that there are financial losses due to the crisis situation. Therefore, the current study is going to be conducted in the hotel industry in the Galle district in Sri Lanka to fill the research gap identified above.

3 Research gap

The existing research findings are mostly focused on the effect of the COVID-19 pandemic on the international and local level, indicating the decrease in tourists and financial failures (UNWTO, 2020; Gössling et al., 2020). However, limited studies have examined the local effect of the pandemic on certain areas in developing countries, such as Sri Lanka.

Most of the research studies are conducted based on quantitative data and giving minimum attention to qualitative data, such as reactions of managerial-level employees, employee experiences, and operational failures in the tourism and hotel industry. There are several studies (Hall et al., 2020; Sigala, 2020) focused on crisis management and resilience; there is limited literature addressing these issues in practical contexts.

Prior research in Sri Lanka has mostly examined the economic impact of COVID-19 on travel at the national level; however, regional hotel industry experiences, especially in the Galle District, have received less attention. Additionally, there hasn't been much consideration of staff experiences, operational disturbances, and crisis management techniques in tourist hotels in previous research. Thus, by combining quantitative and qualitative data regarding the operational, financial, and managerial effects of the pandemic on hotels in the Galle District, this study adds new empirical evidence.

4 Conceptual/theoretical framework

Three major theories are based on this research, such as risk perception theory, tourists' resilience theory, and crisis management theory. The above three theories focus on the effect of the COVID-19 pandemic on the travel and tourism sector and how those organizations managed these situations. According to the crisis management theory, it was shown that the organizations in the hotel sector are faced with crisis situations to recover from them. The tactics, such as modifications of personnel, temporary closures, and cost-cutting approaches, are used by the organizations to recover from the pandemic in the hotel sector.

The ability of the hotel industry to adjust and bounce back from shocks is the main emphasis of tourism resilience theory (Hall et al., 2020).

Changes in visitor behavior are explained by the risk perception theory. Travelers' concerns about health and safety increased during COVID-19, which decreased demand for hotels. Hotels responded by raising their hygienic standards in an effort to win back the trust of their patrons.

In general, the study views COVID-19 as an external shock that resulted in fewer visitors and created operational and budgetary difficulties. In response, hotels adopted several tactics that aided in the industry's recovery and increased its resilience.

Figure 01: Conceptual framework of the study

COVID-19 pandemic

Decline in tourist arrivals

Financial and operational impact

Management strategies (cost, cutting, digitalization)

Recovery and resilience

5 Methodology

5.1 Research Design and Research Approach

This study examines the effects of COVID-19 on hotels in the Galle District using a mixed-method approach that combines quantitative and qualitative data. With an emphasis on examining the current state of the hotel business during the COVID-19 epidemic. Hotel operations, financial performance, and staff impact during the epidemic were investigated using a descriptive research approach. The study offers a thorough description of the actual circumstances the hotel business encountered during the crisis by using a descriptive methodology.

5.2 Study Area

The Galle District, which is situated in Sri Lanka's Southern Province, was the exclusive research area. The Galle district holds significant tourism value through its historical heritage, attractive locations, and thriving hospitality sector as one of the major tourist locations in Sri Lanka. This study was selected because of its significance for the tourism sector in the country, since it offers different accommodations to travelers.

5.3 Sampling and participants

The study utilized a simple random sampling technique to gather primary data for the study from 15 tourist hotels in the Galle district in Sri Lanka, and this strategy provides hotels an equal opportunity to be selected for the sample. Using hotels that are in various sizes, types, and capacities provides valuable insights into the impact of the pandemic, as well it reduces the bias and enhancing the representativeness of all the levels of hotels for the sample.

Accessibility, time constraints, and hotel operations during the COVID-19 epidemic were taken into consideration for determining the sample size. In order to offer significant insights into the operational, financial, and employee-related effects of the pandemic within the Galle District hotel industry, fifteen hotels and forty staff were deemed sufficient.

To guarantee a more comprehensive understanding of the pandemic's effects on the hotel business, the chosen participants represented various operational departments and managerial levels inside hotels. Forty employees were selected for the research. These employees are selected from different locations of hotels, concerning their food and beverage services, housekeeping, management, and front desk.

5.4 Data collection method

Semi-structured interviews were utilized, and structured questionnaires were used for the data collection process of the sample respondents. For the semi-structured interviews, open-ended questions were used to have in-depth knowledge of the employees. For the statistical analysis, structured questionnaires with closed-ended questions were used. Semi-structured interviews were conducted with a selection of staff and hotel management. The interviews, which lasted 20-30 minutes, talked about challenges in operations, financial strain, ways of handling crises, and hopes of bouncing back in the pandemic. The secondary data was collected from various sources, such as online databases, government papers, journals, and statistics of the tourism sector. Secondary data is important for laying a foundation for the primary research findings. It also offered a global and regional view on the effect of the COVID-19 pandemic on the travel and tourism sector based on findings from sources such as the World Travel and Tourism Council (WTTC) and the United Nations World Tourism Organization (UNWTO). Industry reports and government publications for information on trends and policy responses were identified to be used to investigate the larger context.

5.5 Data analysis technique

Both quantitative and qualitative data analysis methods were used in the research. The quantitative data from structured questionnaires were analyzed using IBM SPSS software through statistical techniques. Descriptive statistics, such as frequencies, percentages, and graphs, were used to examine the impact of the pandemic on factors such as occupancy rate, revenue level, and employment conditions of the hotels. Descriptive statistics helped interpret the data effectively. Because the study was exploratory in character and had a limited sample size, descriptive statistical analysis was deemed adequate. The qualitative data were analyzed based on thematic analysis to find out major themes and insights into operational failures, managerial tactics, and perspectives of employees that were collected through interviews.

The major patterns of the data were determined through the thematic analysis. To find recurring themes among respondents, the qualitative interview data were classified into significant themes such as financial issues, operational disruptions, staff impacts, customer behavior changes, and recovery methods. By categorizing and coding qualitative data about recovery tactics and management procedures during the epidemic, major themes were found.

5.6 Validity and reliability

It is necessary to determine the reliability and validity of data to reduce bias in data. The questionnaire was created with clarity and accuracy to generate reliable and consistent findings at the end of the data analysis process.

The questionnaire was created based on earlier research on the effects of COVID-19 on travel and hospitality. Academic supervisors examined the questionnaire to enhance its content validity, relevance, and clarity before to data collection.

The reliability of the data was ensured through a consistent data collection process. Throughout the data gathering process, reliability was preserved by using standardized interview techniques and structured questionnaires consistently. This process confirms the reliability and comparability of the data gathered by the researcher. Standard data analysis methods were used. such as thematic analysis and descriptive analysis, were used to ensure the trustworthiness of results.

5.7 Ethical consideration

When conducting the data collection process, ethical considerations should be carefully addressed. Respondents are entitled to voluntary participation in the data collection process and informed consent, which allows them to continue or stop providing data during the collection process. Further. Confidentiality of data is ensured by the research, and anonymity is concerned with the privacy of the participants. Also, the personal data is disclosed, and the collected personal data was used for only academic purposes. These procedures ensured an ethical data collection process of data collection while maintaining research integrity.

5.8 Limitations of the study

The research has some limitations when conducting this study. There is a limitation in the sample size of the study since it gathered data from only 15 hotels and 40 employees. This will reduce the generalizability of the findings to the whole hotel industry in Sri Lanka since it has limited data points. Further, this research is only based on the Galle district, which excludes other districts in the country since the perceptions and experiences of employees are varied in different areas. Also, this study provides findings only on the effect of the COVID-19 pandemic on the hotel sector locally.

There is a bias in self-reported data. To reduce those limitations, it was utilized different data sources and data analysis techniques were utilized by the researcher. Combining both quantitative and qualitative data, it will give an accurate picture of the effect of the pandemic on the hotel sector.

5.9 Summary of methodology

The selected methods and techniques provide a thorough investigation into the effect of the COVID-19 pandemic on the tourism and hotel sector in the Galle district in Sri Lanka. Through the utilization of both quantitative and qualitative data, it was found that the quantifiable effect and employee experiences related to the crisis. The reliability and consistency of the findings are ensured by the utilization of different sources of data, analysis techniques, and ethical considerations.

6 Findings and analysis

6.1 Impact on tourist arrivals and hotel occupancy

The findings indicate severe disruptions within the hotel sector in the Galle District. Based on both quantitative and qualitative data, it was identified that key issues related to hotel management, employee well-being, and business stability.

Based on the findings, it was found that the decline in the arrival of visitors had a critical and direct effect on the occupancy rate of hotels. There was a significant decline in local and foreign travelers due to the pandemic, as per the perceptions of employees. The main causes for this drop can be determined as restrictions on travel, border closures, and the hygiene needs of tourists. At the same time, Demand for hotel accommodation declined significantly, which resulted in reduced occupancy rates.

Table 01: Summary of key impacts of hotels in the Galle district

Impact area	*result*
Occupancy rate	Decreased by 70%
Revenue	Decreased by 60%
Staff layoffs	40% of employees affected

The results show that revenue levels and occupancy rates drastically decreased during the pandemic, highlighting the Galle District's hotels' extreme operational and financial fragility

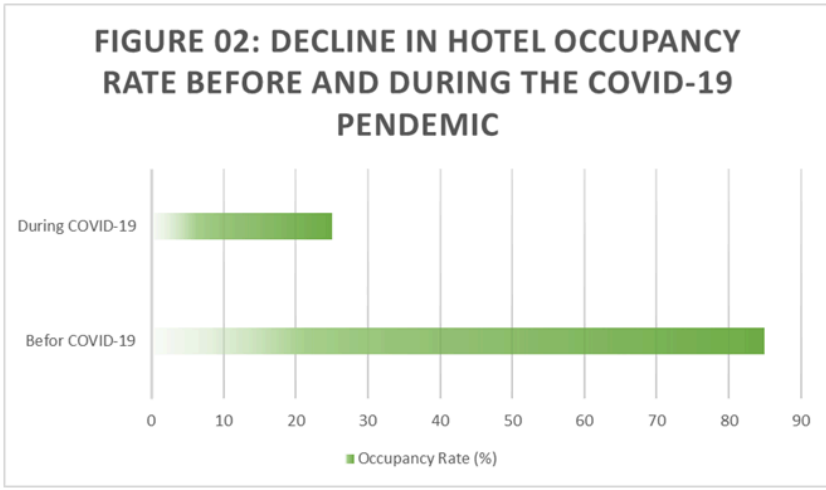


Fig: 2 The bar graph shows how hotel occupancy rates in the Galle District sharply decreased during the COVID-19 outbreak.

6.2 Reservation cancellation and revenue loss

As a result of travel restrictions and reservation cancellations, there was a sharp decline in revenue streams of hotels in the Galle district because of low reservation levels and high cancellation rates. Most reservations were cancelled, and on the other hand, they were postponed because of restrictions in travel locations and uncertainty, which have a significant effect on revenue. The majority of hotels utilize strategies for cost-cutting, such as reducing the number of employees, reducing payment schedules, and limiting service offered, in order to mitigate these issues. According to the findings, it was demonstrated that around 80% hotels faced more than 50% reduction in revenue streams due to the pandemic. Hotel managers' interviews also revealed that during the pandemic, there was significant financial volatility due to fewer reservations and operational limitations. Due to this, current employees suffered from higher workload, reduction in salaries, and unstable employment. "The abrupt cancellation of reservations created major financial difficulties for maintaining hotel operations during the pandemic," a hotel manager said.

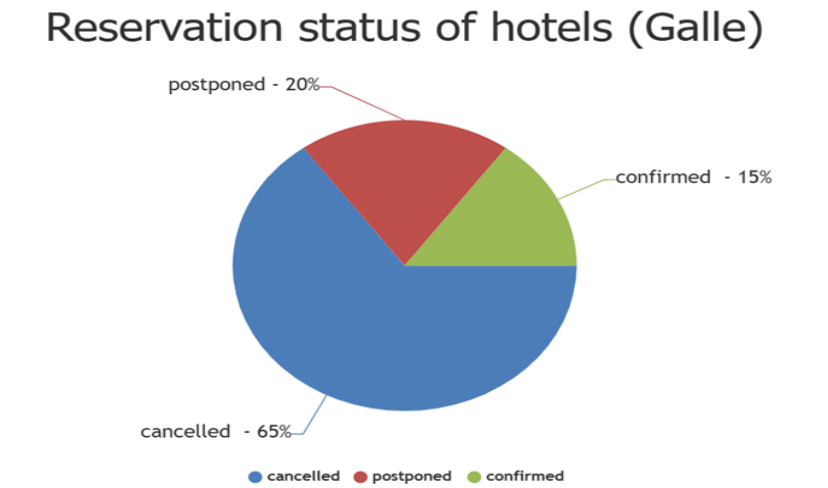


Figure 3: Reservation status of hotels in Galle District during the COVID-19 period.

Table 02: Employee Challenges During the COVID-19 Pandemic

Employee impact	*Percentage*
Salary reduction	55%
Job insecurity	20%
Increased workload	15%
No major impact	10%

The results show that the biggest issues facing employees during the pandemic were pay cuts and job instability.

6.3 Hotel closures and operational disruption

As per the findings of the research, the majority of hotels faced temporary operational closures and permanent closures. Some hotels have made decisions to end the processes since they are not able to bear the costs of operational expenses such as utility bills, maintenance expenses, and compensation. Even though some hotels are open, they are operating limited services with a limited number of employees in a very limited capacity. The effort to reduce operational losses during services showed the extent to which hotels change their operations with the pandemic.

6.4 Health and safety challenges

The findings of the research indicated different difficulties in operations due to the implementation of hygiene procedures in hotel operations and financial performance. During the epidemic, hotels introduced health rules, hygiene procedures, social distancing measures, and employee training programs. These measures were implemented to protect visitors and employees, and these measures increased operational expenses and required more resources to launch them. Therefore, the majority of hotels suffered from balancing profitability and safety.

6.5 Change in customer behavior

The findings demonstrated how customers change their behavior during the pandemic. Tourists became more cautious when selecting travel destinations, places, and lodges for travelling due to the pandemic. Customers increasingly favored hotels with more stringent hygienic standards and accommodating reservation systems, according to a number of interviewees. Further, the decisions taken for travelling are significantly affected by hygiene needs. To address these issues, hotels need to modify their service offerings. To attract more visitors, some hotels introduced contactless services, implemented higher hygiene practices, and offered flexible reservation opportunities. "After the pandemic, customers became more concerned about hygiene standards and safety procedures when selecting hotels," one participant noted.

6.6 Management response strategies

The hotel implemented several strategies, such as cost-cutting, offering diversified services, and focusing on domestic travel to deal with the crisis. Some hotels have continued their operations with their local customer base and generated limited income during the pandemic. One of the key success factors in maintaining clientele is the use of digital marketing strategies and online booking facilities.

Table 03: Management response strategies used by hotels during the COVID-19 pandemic

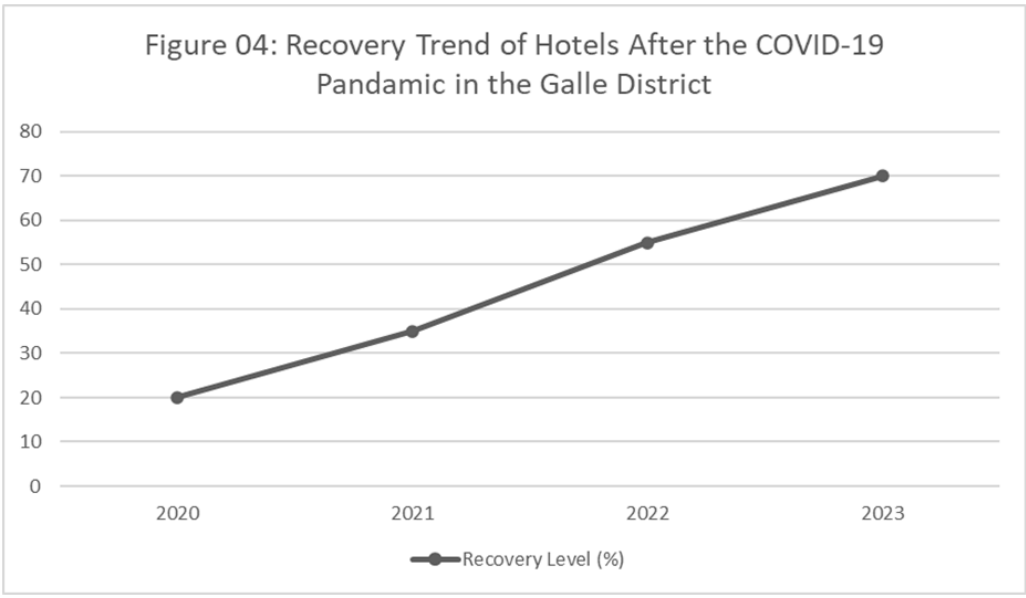
Strategy	*Percentage*
Cost cutting	40%
Digital Marketing	30%
Domestic Tourism Promotion	20%
Reduced services	10%

The results show that the most popular management techniques utilized by hotels to lessen operational and financial strains during the epidemic were cost-cutting and digital marketing.

6.7 Recovery trends and future outlook

The findings of the study demonstrated that the industry is facing a slower recovery process with these difficulties. When travel restrictions were lifted and immunization programs were set up, some hotel operators reported a slight increase in reservations. But the long-term impact of the pandemic was dimmed by numerous concerns among hotels, and the recovery process was slow and uncertain. The results indicate that a complete recovery will be dependent on several factors, including consumer confidence, government regulations, and international travel trends.

The findings demonstrated the need for new solutions, supporting financial systems and successful recovery strategies for supporting hotels' long-term stability. The management of these hotels can use strategic crisis management techniques to understand such issues.



The graph shows how hotels gradually recovered after the COVID-19 outbreak.

7 Discussion and implications

7.1 Discussion of key findings

According to the findings, the COVID-19 pandemic has significantly affected the hotel industry in the Galle district leading to an acute decline in arrivals and occupancy rates. The impact of the crisis on operational disruptions, long-term uncertainty of planning and investment and the vulnerability of the industry to global crises (Gössling et al., 2020).

It was demonstrated that hotels incurred heavy revenue losses due to the cancellation of bookings and a decrease in reservations, and this was identified as the financial vulnerability of the hotel sector during the crisis. These crises require strategic planning approaches (Aladag et al., 2020). The reduction in operational capacity meant there was less demand for hotels. Since the hotels have limited financial resources, they were significantly affected by economic shocks (Hall et al., 2020). These results are in line with those of Gössling et al. (2020), who noted significant operational disruptions and financial losses in the global hotel sector during the COVID-19 pandemic.

The findings demonstrated that employees experienced significant financial and psychological impacts, such as reduced payment schedules, insecurity of jobs, and job loss, which created significant social and psychological impacts. These findings highlighted the necessity of strong employee protection laws because it shows the human aspect of the crisis, and lower-paying workers were more vulnerable (Sigala, 2020).

Since there were health and safety regulations in place as an important factor, the expenses for infrastructure, employee training, and hygiene needs lowered the income flows. This situation led to an increase in focus on financial stability, even though it needs to satisfy customer needs and safety goals (WHO, 2020).

This report states that due to the more discerning tourist during the pandemic, hotels adapted their services and marketing to prioritize lower and safer occupancy. This supports the notion that COVID-19 accelerated customer behavior changes, leading to new customer demand patterns (Sigala, 2020) and more resilient hotels. The results corroborate Sigala's (2020) claim that during the pandemic, travelers grew more wary and hygienic.

This study also demonstrated how the negative effects of crises can be reduced through crisis management strategies. The organizations in the hotel sector implemented proactive and strategic measures, such as cutting expenses, utilizing digital marketing, and focusing on domestic travel to effectively manage the crisis situation. These strategies emphasize the significance of adaptability, creativity, and long-term strategic planning for resilience.

7.2 Theoretical implication

Besides the initiatives such as domestic travel and digital marketing adoption, the existing study offers empirical evidence of how hotels can respond to the crisis through cost-cutting and operational innovations based on the crisis. This study also highlights the hotels' resilient modification and implementation to recover from the pandemic. Resilience involves transformation and adaptation (Hall et al., 2020).

The findings show that the use of health and safety risk perception theory is a reflection of the effect of the perceived risk on the traveler behavior, and this shows the importance of psychological factors on demand for travel during the pandemic situation.

7.3 Practical implications

This highlights the significance of good management strategies for a crisis, such as adaptability, risk assessment, financial preparedness, and recovery plans to ensure business continuity. The study shows how online reservation platforms, digital marketing, and contactless services are important for hotel productivity and competitiveness through digital transformation.

The study also highlights the importance of employee well-being, promotes training, job security, and financial aid, which will ensure staff stability and long-term viability. After maintaining standard procedures on safety and hygiene needs, the post-pandemic era can see an improvement in the confidence of employees and an increase in tourist arrivals.

7.4 Policy and industry implications

The paper stresses the importance of a coordinated strategy for the recovery of the tourism sector. Recovery efforts must be successful through a partnership between industry, communities and governments. Moreover, boosting sustainable tourism can make the sector more resilient and reduce its vulnerability to future crises.

The findings of this study on the transition from tourism to home tourism indicate that diversification of the tourism market is needed to reduce dependence on foreign tourists. The industry has the ability to market regional tourism destinations and develop local tourism initiatives, which can create a more robust and stable tourism system.

The study also emphasizes how crucial long-term strategic planning is to the tourism industry. Infrastructure, technology, and human resource investments can improve the industry's ability to handle upcoming difficulties. The importance of building resilience must be emphasized by policymakers and industry stakeholders.

8 Conclusion and recommendation

8.1 Conclusion

The study concludes that the hotel industry in Galle District suffered significant operational and financial disruptions from the COVID-19 outbreak. The findings underscore the importance of resilience, strategic planning, and sustainable recovery measures for the long-term sustainability of the tourism industry.

8.2 Recommendation

Based on the study findings, some recommendations have been made that could assist the Sri Lankan hotel industry to sustain itself in the future and recover. First of all, the hotel operators need to work out detailed plans for crisis management. To make sure that hotels are better prepared to deal with future disruptions, these tactics should include risk assessment, emergency planning, and financial readiness. Having multiple income streams and setting aside emergency funds could reduce vulnerability during crises. Encouraging domestic travel ought to be given top priority as a crucial recovery tactic.

In order to boost consumer engagement and operational efficiency, digital technology usage should be increased. Hotels can stay competitive in the market and adapt to changing customer preferences with the use of digital marketing, online booking platforms, and contactless services. It is not enough for these high standards of safety and cleanliness to be a response to the epidemic; it should become the norm.

The study emphasizes the need to prioritize employee welfare by providing financial support, job security, and training to improve employee morale, productivity, and stability.

Finally, sustainable tourism practices need to be focused on to ensure long-term development. This involves minimizing negative impact on the environment, supporting the local communities in the region, and promoting responsible travel.

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Chapter 23 :Margins of Justice: Intersections of Poverty, Stratification and Displacement in the Struggle for Human Dignity

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Abstract
It asserts that justice cannot be effectively defined by considering individual studies on income deprivation, hierarchy of classes, forced mobility, but should be defined as a multidimensional and structural process with its roots in power, history and institutional arrangement. The work redefines justice as a normative and lived social experience, by relying upon classical and contemporary theories of justice, such as the distributive, capabilities, recognition and critical approaches to justice. The discussion demonstrates that poverty is a multidimensional capability deprivation that constrains substantive freedoms and its reproduction of exclusion by structural and intergenerational means. Social stratification also institutionalizes inequality in education, labor markets and political systems that generate differentiated citizenship and unequal access to a right. The vulnerabilities are aggravated by displacement as it interferes with legal identity, social belonging and economic stability and the current system of governance and the law is usually not sufficient to protect the impacted populations. The paper puts into focus the interaction between these three dimensions in cumulative and intersectional manners, creating the so-called invisible citizens who are not added to lawful, political, and data recognition systems. It also critically analyses the weaknesses of the fragmented policy responses with the focus on gaps in implementation, governance and inclusion. It builds a relationship paradigm to comprehend justice based on the cross-cutting relationships between poverty, social stratification and displacement. Lastly, it promotes the idea of transformative justice that requires structural change based on human dignity, equity, and participatory inclusion. In general, the chapter has made contributions to the body of justice by providing a unified and intersectional perspective that links the poverty, stratification, and displacement as processes that reinforce each other as sources of inequality.

Keywords: Poverty; Social Stratification; Displacement; Intersectional Inequality; Transformative Justice

1. Introduction

1.1 Background and Context

A paradoxical growth of world wealth and a rise in and more and more multifaceted inequality has characterized the twenty-first century. Most part of the world has enjoyed a continued boom in economic growth but the allocation of benefits has continued to be very uneven, which has led to endemic poverty and increased socio-economic inequalities across and within societies. According to modern development literature, economic growth does not necessarily lead to fair increases in living standards, especially among the disadvantaged groups, both in the Global North and the Global South (Piketty, 2014; Stiglitz, 2012). Meanwhile, poverty has become more multidimensional, as it is no longer limited to income deprivation and now also encompasses lack of access to education, healthcare, housing and legal safeguards. This is in line with the capability approach of poverty that views poverty as lack of basic freedoms and not just low income (Sen, 1999). Although the world has made international pledges like the Sustainable Development Goals (SDGs), structural poverty is highly rooted in most parts of the world, and it is usually reproduced by the unequal economic structure and ineffective redistributive policies. In tandem with those advancements, displacement, both forced and voluntary, has been escalating throughout the world because of the intersecting factors such as armed conflict, climate change, political instability, and mass development initiatives. The United Nations High Commissioner for Refugees (UNHCR) notes that the levels of displacement are much higher in the past decades, transforming mobility trends and vulnerability in different regions (UNHCR, 2023). Displacement is not just a physical displacement but it also causes social dislocation in the long term, deprivation of rights, and livelihood and identity disturbance. In this respect, the concept of justice becomes a disputed and multidimensional one. Distributive justice Classical theories of justice, including Rawlsian distributive justice, capabilities-based and recognition-based theories, focus on fairness, equality and the human dignity. Yet, modern thought acknowledges more and more the fact that justice can no longer be narrowed down to formal equality or redistribution of resources. Rather, it has to factor in structural inequalities, past injustices, and geographical aspects of marginalization (Fraser, 2008). In this way, justice in the current context can be seen as a normative ideal and a highly political contest which is defined by power relations.

1.2 Identity of the Problem

Although there is a lot of literature on poverty, social stratification, and displacement, these phenomena are mostly studied separately, disregarding the fact that they are interrelated. This disjointed system inhibits an in-depth interpretation of the functioning of inequality along with various levels of social life. In reality, justice is not uniformly experienced through the positions of classes, spatial locations and mobility statuses, resulting in stratified forms of exclusion. Poverty plays out with

structures of stratification, i.e., class hierarchy, caste, ethnicity, and gender, to ascertain the rights, resources, and opportunities of the individuals. They are not neutral systems of stratification but historically created and institutionally strengthened systems of stratification that bring about enduring inequalities in formal and informal institutions. This image is further complicated by displacement which redefines legal status, social affiliation and access to protection systems, making often the afflicted groups of people invisible to national systems of justice. Available literature is inclined to adopt poverty alleviation, social inequality, and forced migration as the independent policy and analytical areas. But this distancing clouds their relationality. As a matter of fact, poverty may make people more vulnerable to displacement, stratification is known to predetermine exposure to both poverty and displacement and displacement tended to aggravate poverty and social exclusion. This interdependence necessitates a combined framework of analysis which puts justice at a crossroads of these three dynamics.

2. Conceptualizing Justice and Human Dignity

2.1 Classical Theories of Justice

The issue of justice has been a significant focus of the political philosophy and social theory since ancient times, and classical frameworks offer the basic approaches to consider fairness, rights, and distribution. The theory of distributive justice as formulated by John Rawls is one of the most influential formulations of modernity. According to Rawls (1971), a just society is a type of society where social and economic disparities are so organized that they serve the least privileged, and social and economic relations are determined by principles selected under a hypothetical veil of ignorance. This model focuses on equality in the allocation of primary goods like income, opportunities and fundamental liberties. Nevertheless, although Rawlsian justice has greatly influenced the modern discussion, it has been criticized as not being much concerned with inequalities in the world and power imbalances in its structures. In addition to Rawls, there have also emerged larger traditions of social justice which focus on equity, inclusion and structural change. Critics like Iris Marion Young (1990) criticize distributive models of justice for only considering justice within the framework of oppression, domination and power relations. The view extends the justice to a wider scope of resource distribution, cultural, and political aspects of inequality, especially the exclusion of certain groups of the population. Another notable advance in the theory of justice is the capabilities approach proposed by Amartya Sen, and elaborated by Martha Nussbaum. Conceptualizing justice Sen (1999) does not focus on access to resources, but on the real freedoms of individuals to accomplish the desired functionings, which are valued. Nussbaum (2011) elaborates a list of the key human abilities required to live a dignified life, such as bodily health, education, political action and being in control of the surrounding environment. This is especially pertinent to the context of comprehending poverty and inequality in that it illuminates the way structural circumstances limit the substantive freedoms despite the formal

rights. The capabilities approach contrasts with other distributive theories, which emphasize material goods, as the main objective of justice.

2.2 Justice Based on Lived Experience

Although classical theories have normative underpinnings, recent scholarship is shifting towards the focus of justice as an experienced and lived phenomenon. This change is an indication of the increasing awareness of the fact that justice is not merely a principle of law or a legal institution but also a day-to-day reality that is influenced by social relations, identity and power. One of the most important differences lies between the institutional justice and everyday justice. Institutional justice entails formal mechanisms like courts, legal provisions, and administrative processes that are meant to promote justice and rights. But there is often an unequal access to these institutions, especially of the marginalized groups who are blocked by poverty, discrimination or ignorance of the law. Conversely, everyday justice is the way people perceive fairness, recognition and dignity in their day-to-day relations with the society, such as in work places, communities and in the service of the community. Recognition is a key aspect of this experience dimension of justice. According to Axel Honneth (1995), the issue of justice is closely related to social recognition, wherein people have to be recognized as fully-fledged members of society to build up self-respect and agency. Misrecognition on the other hand translates to social rejection and psychological damage. On the same note, Nancy Fraser (2008) suggests a two-pronged justice model that incorporates redistribution (economic fairness) and recognition (symbolic and cultural inclusion), and points out that the two aspects are required to deal with inequality.

2.3 Foundational Principle Human Dignity

Human dignity is an important normative benchmark upon which contemporary understandings of justice and human rights are based. Philosophically, the concept of dignity is usually related to the moral philosophy of Immanuel Kant, according to which there are no means to an end and people have to be treated as an end. During the modern discussions of human rights, dignity is a key factor in the international law systems, among them the Universal Declaration of Human Rights (United Nations, 1948) which openly acknowledges the innate dignity and equality of all the members of the human family. Dignity is therefore a moral as well as a legal doctrine that forms the basis of claiming justice. Dignity and rights have a strong connection with social inclusion and especially in the cases of poverty and displacement. The basic services, legal protection and societal recognition to which individuals are denied access to, essentially erode their dignity. This is further supported by Sen capability approach which also focuses on the fact that dignity demands substantive freedoms, but not formal rights. Dignity is abstract and not concrete unless one is able to lead a life that he or she values. Social inclusion is thus a very important aspect of dignity. Inclusion

does not just mean access to resources but also being part of societal, economic as well as political life. Exclusion on the other hand is a denial of dignity, since people are systematically excluded in terms of what is systematically marginalized out of the systems that define their lives. In this regard, dignity is a kind of mediator between the normative theories of justice and lived experiences of inequality.

2.4 Critical Justice Views

The critical views of justice criticize universalist and Eurocentric approaches with the emphasis on historical and structural aspects of inequality. According to the postcolonial theorists, the prevailing Western ideas of justice do not usually consider colonial pasts, the imbalance of power in the world and epistemic domination. Some scholars like Spivak (1988) and Mbemba (2001) have stressed that the effects of colonial pasts are still felt in the present day social, political and economic order affecting the definition and dispersion of justice in the world. With this in mind, it is impossible to comprehend justice without referring to the historical generation of inequality. Colonialism was also associated with the extraction of resources but also the legal, political, and epistemological systems, which still organize the hierarchies in the world. In turn, this could lead to the reproduction of various forms of epistemic exclusion by many justice frameworks that originated in the Global North, marginalizing other knowledge systems and lived experiences of the Global South. The key issues of critical justice theory are structural inequality and power asymmetry. Iris Marion Young (1990) believes that injustice is not only the outcome of individual actions but also implicated within the social structures. Such structures encompass institutional setups, economic order, and cultural conventions which are systematically designed to benefit certain groups, and disadvantage others. Likewise, Fraser (2008) points out that the global capitalism has resulted in the emergence of novel types of transnational injustice that cannot be resolved using the nation-based approaches only. Critical approaches to point out the intersectionality in the processes of experiencing justice and injustice. People are placed in more than one social position at a time, e.g. class, gender, ethnicity and migration status, and are interacting to create compounded forms of disadvantage. This intersecting prism is crucial in the operation of justice in reality especially in the realms of poverty and displacement. In general, critical views develop the notion of justice beyond the distributive fairness into structural change, epistemic inclusion, and power relations on the global scale. They also put scholars and policy makers to the challenge of redefining justice as a process that is dynamic, contested, and is influenced by history, inequality, and resistance.

3. Poverty and the Reproduction of Injustice

3.1 Understanding Poverty Beyond Income

The concept of poverty is now much richer than the purely monetary approach and includes multidimensional and capability views. Traditional economic methods tend to

understand poverty as being a lack of income or consumption, but this lacks the scope to reflect the lived reality of poverty. The Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP) developed a multidimensional poverty framework, which highlights that poverty is a combination of multiple and overlapping deprivations in access to education, health care, housing, sanitation and basic services (Alkire & Foster, 2011). Theoretically, Amartya Sen's capability approach can be used as a starting point to understand poverty as the lack of substantive freedom, as opposed to just financial resources. Sen (1999) suggests the concept of 'capability deprivation' – the deprived person is not really capable of achieving what is valued in life. This means the right to education, to a healthy life, to social and political life and to have agency. The framework is extended further by Martha Nussbaum (2011) who identifies central human capacities which are essential for dignity and well-being and this can be said to be a violation of human flourishing when one is poor. This wider concept exposes the fact that poverty is not only an economic phenomenon but a multidimensional phenomenon of exclusion which impacts on all aspects of human life. It also emphasizes the structure and relationality of deprivation; the social, political and institutional mechanisms that influence life chances.

3.2 The Structural Determinants of Poverty

Poverty is very much part of historical and structural processes, which are manifested in current inequalities. One of the biggest influences is that of the legacy of colonialism, the way it organized economies, and how that continues to affect worldwide inequality. The long-term consequences of colonial extraction of resources, exploitation of labor and institutional restructuring, which has resulted in dependency, are ongoing in postcolonial economies (Acemoglu & Robinson, 2012). The above historical processes contributed to unequal development and structural inequalities among and within countries. Modern economic systems also help to perpetuate poverty, by creating processes of 'precarious labour' and 'informalisation'. Many Global South economies have a sizeable informal sector, where workers are largely uncontractual, lack social protection and are not legally recognised. Informal workers are also at a risk of being the first to feel the impact of shocks and exploitation because they do not necessarily have stable income, job security and access to institutional benefits. The International Labour Organization (ILO) estimates that informal employment in developing regions is much larger than traditional employment and is not a matter of personal preference, but rather a structural issue in the labour market (ILO, 2018). The flexibilisation of the labour market, the cutback in welfare services and the privatisation of key services have also been a product of global economic restructuring, as have neoliberal reforms. These have exacerbated economic inequalities and pushed up precarious jobs. Therefore, poverty can not only be a

consequence of economic but also a result of economic organisation and economic policy making.

3.3 Poverty and Access to Justice

Poverty has a significant impact on access to justice, and it is possible to talk of ‘legal invisibility'. Poor people often do not have the resources, knowledge and institutional access to interact with formal justice systems. The legal processes are complex, expensive and time consuming, making it a great obstacle for the low-income population. The poor are therefore often cut off from legal protections and remedies that are available in theory, but not in practice, through the justice system.

Barriers to institutional justice are many layered. Economic barriers include transportation costs, the cost of legal representation and court fees. Administrative barriers include bureaucratic complexity, lack of documentation and procedural inefficiency. Social barriers are discrimination, stigma and lack of knowledge of legal rights. These are combined to produce a justice gap with formal equality not necessarily correlating with substantive access to justice (Galanter, 1974). In addition, poverty is closely related to the social exclusion and marginalisation. There is systemic exclusion of marginalised populations, such as the urban poor, the rural population or informal workers from decision-making processes and public institutions. This exclusion restricts their right to claim, govern and seek redress for grievances. The justice system in many instances is a system that re-creates inequality in favor of those who have more economic, social and cultural capital. Thus, access to justice is not only a legal question, but a question of social justice from a socio-legal point of view. Formal laws by themselves cannot have proportional justice impacts if they fail to tackle the socio-economic inequalities which underlie them.

3.4 Poverty as a Vicious Circle of Entrenched Injustice

Poverty is a ‘dynamic and self-reinforcing cycle of disadvantage which is passed on from one generation to the next. Intergenerational poverty happens when there is a lack of opportunity for upward mobility because of structural inequalities and, consequently, deprivation is not interrupted. Kids who are born poor are more likely to be poorly educated, suffer poor health and have limited economic opportunities, passing on the cycle of inequality (Corak, 2013). The social stigma and institutional neglect only further reinforce this cyclical nature of poverty. Poverty carries negative stereotypes, such as seeing the individual as lazy, unproductive or not deserving. The stigma leads to their marginalisation and lessens their access to social and institutional supports. Institutional neglect in turn can be seen in underinvestment into poor communities, lack of adequate public services and lack of policy focus on the poor and marginalised. Pierre Bourdieu's theory of social reproduction offers appropriate theoretical lenses to grasp these dynamics. Bourdieu (1986) believes that there is a

reproduction of social inequality that is carried out in the form of economic, cultural and social capital that are transferred in certain groups' favor and to others' detriment. Lack of access to capital in all its forms restricts people from breaking out of their structural disadvantage in the context of poverty. Furthermore, there are multiplicative effects between poverty and institutional systems that further promote exclusion. Welfare systems can be insufficient and/or conditional, meaning that they do not cover the most vulnerable, and labour markets may not offer stable employment opportunities. These systemic conditions produce feedback loops that result in poverty begetting poverty, and poverty begetting disadvantage. Therefore, as well as being a state of deprivation, poverty should also be studied as a process of the continuous reproduction of injustice, within institutional, social and economic structures.

4.1 Social Stratification Theories

Social Stratification is the systematic and enduring inequality which ranks individuals and groups in a hierarchy in the social structure. The classical sociological theories focus on the division based on class as the main basis of stratification. Karl Marx theorized class as a consequence of relation of production, that is, in a capitalist formation, class is defined by capital, and power/exploitation are the result. However, Max Weber further developed stratification theory, proposing that inequality is not only economic, but also social and political, and adding a multidimensional approach to stratification which includes class, status, and party (Weber, 1978). An extension of these classic foundations is the contemporary stratification theory based on Kimberlé Crenshaw's (1989) concept of intersectionality. Intersectionality focuses on the interplay between systems of inequality (gender, ethnicity, caste, race and class) that combine to create multiple forms of disadvantage. This method is especially important in comprehending the inequities in social groups in relation to justice. For instance, a poor woman from the ethnic minority group could face double or multiple discrimination which cannot be understood by using only one of the axes of inequality.
Pierre Bourdieu's theory of social reproduction also helps to explain stratification because he focuses on the role of intergenerational transfer of economic, cultural and social capital that reinforces the hierarchical nature of stratification (Bourdieu, 1986). These theoretical views, each in its own way, illustrate that the phenomenon of social stratification is not random but rather is a systemically created and reproduced phenomenon in institutional and cultural ways.

4.2 Institutionalized Inequality

Social stratification is built into the major institutions that determine opportunity and resource access such as education systems, labour markets and political institutions. These institutions can serve as a means of re-production and not equalisation of inequalities. Education systems, for example, are a key area which influences life chances. Education is presented as a means of social mobility, but the lack of equal

access to good education gives a further reinforcement to class structures. Generally, students in privileged positions are expected to have more access to quality educational facilities, qualified teachers, additional related learning resources, while students in less privileged positions are likely to attend a school with lower quality educational facilities. This educational inequality also manifests itself in unequal access to higher education and employment opportunities, leading to a stratification from one generation to the next. Labor markets also contribute to institutionalizing inequality, via segmented markets and precarious employment structures. The high quality and formal sector jobs are generally available to those with greater educational and social capital, and low-income groups are predominantly in informal, low-wage and insecure jobs. This segmentation is indicative of the overall structural inequities with regard to access to training, networks and institutional support. Thus, labour markets embody and generate social hierarchies. Another important sphere of institutionalized inequalities is that of political representation. Many societies tend to be too centralized with political authority, and marginalized groups have little representation in decision-making. Because of this "elite dominance", policies are too often designed to benefit already privileged groups, and thus help to perpetuate structural inequalities. Political sociology literature indicates that lack of equal engagement in government leads to a lack of democratic accountability and efficacy of redistributive justice systems (Acemoglu & Robinson, 2012). In combination, these institutional areas present a picture of how stratification is intertwined in the fundamental structures of society and influences access to justice and opportunity.

4.3 Stratification and Unequal Citizenship Stratification and Unequal Citizenship

Social stratification has a direct impact on the quality and kind of citizenship that an individual or groups of people enjoy. In theory citizenship is a status that provides equality of rights, but in reality, it is highly unequal. This phenomenon is sometimes known as 'differentiated citizenship', in which the extent to which citizens enjoy rights, services and protection is markedly different across social groups. The differential access to public services and legal protections is one important aspect of unequal citizenship. Lower socio-economic status groups and other marginalized groups are often unable to access health, education, housing and justice systems. Some of these barriers could be: bureaucracy, geographical distance, lack of documentation and discriminatory practices. Consequently, the formal equality of the laws is not equivalent to substantive equality in living equality. These inequalities are compounded by elite control of justice systems. In many settings, legal and political systems are shaped or dominated by elite groups, having access to and control over disproportionate amounts of resources and decision-making authority. This can lead to the differential enforcement of the law, differential accountability, and differential protections of rights. Elite capture is a term that refers to the way that institutions that are supposed to be fair can also be enacting privilege and exclusion. The result is a

citizenship based on a hierarchy of rights and entitlements. Instead of universal, citizenship is based on socio-economic, political and social identity. This undercuts the notion of citizenship equality that the liberal approach assumes and exposes the high level of hierarchy of the justice systems in practice.

4.4 The Symbolic and Cultural Aspects of Inequality

In addition to material and institutional aspects social stratification is also maintained through symbolic/cultural aspects. Symbolic inequality, in this sense, are the ways in which meanings, norms and cultural representations sustain and make legitimate social inequalities and hierarchies.

The stigma and discrimination are at the core of symbolic inequality. Stigma is a social process that discredits and socially devalues anyone who possesses certain characteristics (such as poverty, ethnicity, disability or social status) as described by Erving Goffman (1963). Stigmatized people are subject to withdrawal, exclusion and deprivation of not only material resources but also from social recognition and dignity. This serves to confirm their subordinate role in the social systems in general. Social labelling processes also work to reinforce inequalities by assigning people to socially created identities which have diverse values. Institutional and community responses to children and families often include labels, for example, poor, uneducated or migrant, which can influence the way children and families are perceived and treated. These labels tend to become self-perpetuating and constrict opportunities and life pathways. It will be useful to consider Pierre Bourdieu's notion of symbolic violence for understanding how inequalities become normalized. Symbolic violence is the incorporation of dominant social hierarchies by the dominated groups, in such a way that they deem their inferior position to be natural or inevitable (Bourdieu, 1991). Inequality is normalised and legitimised in the social discourse, media and education system by means of cultural reproduction. Normalisation of inequality is an important element in maintaining stratification systems. Where inequalities are seen as ‘fair' or ‘fair play', inequalities might not be seen as unjust and may not be fought. This is the cultural dimension of inequality which helps to hold stratification in place by means of coercion or economic means, but also by consent and internalized belief systems.

5. Displacement and the Disruption of Justice

5.1 Types of Displacement

Displacement is a multidimensional phenomenon which denotes forced or involuntary movement of persons and/or communities away from place of origin. In the modern world, displacement happens in a context of political, environmental and developmental reasons and it is one of the most urgent issues of justice and human dignity. One of the most important forms of displacement continues to be forced displacement as a result of conflict and persecution. Millions of people are forced to leave their homes for safety due to armed conflict, political unrest and systemic

persecution. Forced displacement is now at record highs worldwide, with the United Nations High Commissioner for Refugees (UNHCR, 2023) indicating that this is largely due to the presence of long-standing conflicts and weak governance structures. These populations are frequently in situations of immediate threat to life, security and basic survival. Climate displacement is now becoming a major issue on the international agenda, especially in climatically sensitive areas. Communities are increasingly being forced to move due to environmental degradation, sea level rise, extreme weather and loss of land. While climate displacement is not always a clear-cut case of "refugeehood," it is also a scale and impact that is quickly growing, especially in low-income coastal and agrarian areas (IPCC, 2022). This type of displacement brings environmental justice and social inequality into a focus. Another, significant category is development-induced displacement, which takes place when populations are forcibly displaced because of infrastructure projects, urban expansion, dams, mining or industrial developments. Many such projects are undertaken in the guise of economic growth and modernity, but they often lead to the displacement of people, their loss of homes, livelihoods and community networks. The "impoverishment risks model" of Cernea (1997) illustrates how such systematic processes of impoverishment may occur through development induced displacement, leading to landlessness, joblessness, and social disarticulation. These aspects of forced mobility highlight that forced migration is neither one-dimensional nor a monolithic experience, but rather a product of multiple and complex political, environmental, and economic processes.

5.2 The Legal and Institutional Gaps

While there are many people who are refugees and internally displaced, the current legal and institutional frameworks are inadequate to adequately meet the rights and needs of displaced people. The international refugee protection system governs the refugee status of people who are fleeing persecution, and is mostly regulated by the 1951 Refugee Convention and the 1967 Protocol. This framework is however increasingly recognised as too restrictive, particularly in responding to climate induced and/or development induced displacement which are not encompassed by the definition of refugees (Goodwin-Gill & McAdam, 2007). A big gap in existing systems is that displaced persons as a result of climate change are not formally legally recognized. People who have fled their homes due to environmental situations are not necessarily legally considered refugees, and therefore are not entitled to the formal refugee protection systems. This situation is a legal void, and scholars refer to this as "protection vacuums," in which certain populations are without legal protections or mechanisms to seek help.

The statelessness also aggravates the legal situation of the displaced people. Stateless people, those not recognized as citizens by any state, have extremely limited access to education, health care, employment and legal protection. Discriminatory nationality

laws, state succession or administrative exclusion are frequently the causes of statelessness. Displaced persons are invisible in formal governance, and are effectively outside of the justice system when they do not have legal identity or documentation (Blitz & Lynch, 2011). Documentation barriers also are an important issue in restricting access to rights. Displaced populations often do not have access to their identity papers, property records, legal papers and so on, and lack documentation of their citizenship, ownership, or eligibility to receive services. The absence of documentation is a challenge to access to institutional justice, and contributes to vulnerability in host societies.

5.3 Displacement and Loss of Rights are Connected

Displacement brings about a loss of rights, one that is profound and multidimensional, impacting legal, economic and social aspects of life. The most immediate is the loss of the rights to the property. A primary element of economic security and social stability is access to land, housing and productive assets, which is often lost by displaced persons. Failure to recover property and/or to receive compensation make economic marginalisation even stronger. Loss of material, in addition to displacement, is the loss of identity, citizenship rights. Citizenship is not just a legal status, but it also provides a sense of belonging, recognition and access to state protection. People who are displaced, especially if they cross a national border, may lose or have their citizenship rights suspended. This de-legalisation means a severe limitation of access to public services and institutional protection. Populations that have been displaced are also very vulnerable in host societies. Many are not formally recognised or have a stable legal status, meaning that they often don't have access to employment, healthcare, education and housing. Restrictive migration policies, barriers at administrative level and lack of social protection systems compound this vulnerability. Thus, it is common for IDPs to be in the margins of urban areas and in informal sectors. Human rights-wise, displacement is a total violation of rights, civil, political, economic and social rights. It has a cumulative effect which leads to a considerable decline in the dignity, autonomy and well-being of people.

5.4 Social Exclusion of Displaced Populations

Displaced populations can encounter high levels of social exclusion, in addition to legal and economic deprivation, by the host population. Xenophobia, the hostility, discrimination or fear directed towards foreigners or migrants, is one of the most widespread types of exclusion. Often, perceptions of competition for limited resources, cultural differences and political rhetoric that positions migrants as a threat to national identity and economic stability contribute to xenophobic attitudes. This social hostility results in the marginalisation of people who have been displaced, and thus their limited ability to integrate to host societies. In many situations, displaced populations are trapped in informal settlements or refugee camps, where the supply of infrastructure

and access to services are low, and there is a high level of overcrowding. They are places that embody the spatial aspects of social exclusion, in which displaced people are cut off from mainstream society, not only physically but also symbolically.

Informal settlements also create precarity as they limit economic activities and mobility. People living in slums typically work in informal economy sectors, which are often poorly paid, insecure and lack legal protections. This perpetuates the vicious circle of poverty and exclusion and makes it hard for the displaced populations to attain long-term stability. Limited political representation and institutional neglect further contributes to social exclusion. These displaced populations have no formal political voice or representation in political decision-making processes which affect them directly. Their lack of participation in governance mechanisms means that they cannot represent themselves for rights, protection and resources. In this context, displacement is not just a move in space, but is an ongoing and continuous process of social exclusion that impacts access to justice, dignity and belonging.

6. The Intersection of Poverty, Stratification and Displacement.

6.1 Intersectionality of Injustice

Single-axis explanations of injustice poverty, class stratification and displacement as an isolated humanitarian issue are insufficient to understand injustice in contemporary societies. Rather, these dimensions are intertwined and result in what scholars' term as intersectional disadvantage. Originally derived from feminist and critical race theory, intersectionality captures the interaction between different axes of inequality (class, gender, ethnicity, legal status) which are not reducible to any of the constituent parts and create specific forms of marginalization (Crenshaw, 1989). The global inequality, poverty, social stratification and displacement merge to create a multi-layered vulnerability. The lack of resources linked to poverty prevents people from moving or adapting; stratification dictates who is at risk, and who is protected; and displacement causes disrupted social, legal and economic security. These forces can combine to create compounding forms of exclusion that compound over time. As is stated in literature of development studies, disadvantage is not simply additive but cumulative, as each of the disadvantages adds to the other in dynamic ways (Sen, 1999; UNDP, 2023). Intersectional injustice, therefore, is not only the simultaneous experience of multiple disadvantages, it is the failure of the institutional systems to recognise those multiple disadvantages.

6.2 Cumulative Disadvantage

One of the key mechanisms underpinning poverty, stratification and displacement is cumulative disadvantage. This notion is about how inequalities in the early years manifest as vulnerability trajectories later in life. Poor people are more vulnerable to environmental threats, have less capacity to adapt to environmental changes and are

less likely to have access to legal and political safeguards. Consequently, poor people are more likely to be forced to migrate, as a reaction to conflict, climate shocks or push by development. Empirical studies on displacement reveal that vulnerable populations suffer disproportionately from displacement, including people residing in informal settlements or in areas exposed to hazards and in politically marginalised communities (IDMC, 2024). People who lose their homes tend to lose economic status, assets, and to have limited access to work and services. These results are not arbitrary, but are shaped by existing social inequalities. Stratification also shapes the ability to recover from a displacement and to stay out of cycles of precarity. Those who are better off socio-economically are likely to have more resort to legal papers, sources of capital and social networks to rebuild their livelihoods. Conversely, the lower-strata populations experience a long-term instability, getting stuck in informal sectors, or humanitarian dependency. It's a cumulative process that demonstrates that inequality isn't a static state, but one that's reproduced over time and space.

6.3 The Issues of Spatial Inequality and Territorial Justice

Spatial inequality is a key determinant in the interaction between poverty, stratification and displacement. Territorial justice is based on the idea that rights, services and opportunities are not equally distributed in geographic space (Soja, 2010). The urban and rural, core and periphery are all enveloped in unequal development structures. Rural areas are often less visible politically, less well served, and have lower levels of infrastructure. Such conditions make people more likely to be displaced especially in contexts of climate change where livelihoods are directly affected, such as agriculture. Urban areas, which provide more economic opportunities, can also see high numbers of forced displacement in informal settlements with high levels of overcrowding, insecurity and lack of public services access. Border regimes also exacerbate spatial inequality through legal and administrative means of regulating mobility. Migration governance systems often focus on security, and migrants are often treated differently according to their legal status, class and nationality. These space controls result in a hierarchy of mobilities, some populations are allowed to move freely, some to be immobilized, and others to be compelled to follow erratic migration routes.

6.4 The Combination of Poverty, Stratification and Displacement Results in a Similar Pattern of a Structural Exclusion in Various Contexts

One of the most visible aspects of this intersection are the poor people who are displaced and living in urban informal settlements. A person pushed out of a country or area by conflict or environmental disaster may move to urban areas to find a way to survive. Low financial means and lack of legal recognition however, force them to live in informal settlements where they have no security of tenure, sanitation and public services. These conditions contribute to material deprivation and social marginalisation. There is also an example of "layered injustice" in refugee camps.

Camps have been created as temporary protection areas, but often transform into semi-permanent refugee settlements, where refugees and internally displaced persons have limited mobility, few work opportunities, and rely on humanitarian assistance. Camps can be divided into different groups of people based on nationality, ethnicity, or time of displacement, which can result in a hierarchy of access and privilege. Another type of structural vulnerability is labor migrants. The majority of migrants who come from disadvantaged backgrounds are entering into insecure labour markets, both nationally and internationally. They are often not entitled to social protection because of their legal situation and are compelled to accept low pay and precarious work due to their economic situation. This confirms the hierarchical nature of the labour market, which is similar to the global hierarchy of inequalities (Castles, de Haas, & Miller, 2014). As illustrated in these thematic cases, displacement does not remove or abolish preexisting inequalities, but rather respatializes or re-institutionalizes and frequently exacerbates them in new contexts.

6.5 Producing 'Invisible Citizens

The most important consequence of the combination of intersecting inequalities can be the creation of invisible citizens, that is, groups who are denied formal recognition in law and policy, and in data and statistics. Data invisibility is the lack of representation of marginalised populations in administrative data, census systems or digital data. This makes them harder to see when it comes to planning policies and allocating resources - they are in fact invisible and statistically missing.

Legal invisibility occurs when displaced or poor people do not have legal documents, like birth certificates, birth registration or residency permits. Access to education, healthcare and employment is severely limited if there is no legal recognition, thus continuing cycles of exclusion.

Political invisibility is a lack of representation in decision making. Many of the marginalised populations, especially the displaced, have no voting rights or political voice, and have no institutional space to participate. This undermines accountability and makes it less likely to influence policies which directly impact upon their lives. These different kinds of invisibility are together an illustration of the injustices as not only material but also epistemic and institutional. The production of exclusion happens, as critical development literature has pointed out, when there are systems of classification, recognition and governance that define who is legitimate subject of rights (Scott, 1998; De Genova, 2018).

7. Justice, Policy, and Institutional Responses

7.1 Social Protection Systems

Social protection systems are one of the most significant institutional responses to poverty, inequality, and vulnerability experienced due to displacement and social

stratification. Generally, these systems comprise cash transfer, food assistance, unemployment benefit and targeted welfare programs that aim to decrease deprivation and improve human well-being. Social protection is not only a safety net, it is increasingly being regarded as a transformative tool which can tackle structural inequality in development economics and social policy literature (Barrientos, 2013). Cash transfer programs have been widely adopted in low- and middle-income countries as a way to counteract poverty and increase access to health and education and are either conditional or unconditional. When well targeted, such measures are shown to have a positive impact on human development outcomes and strengthen households' resilience (Fiszbein et al., 2009). They, however, are highly dependent on the administrative capacity, proper identification of beneficiaries, and inclusive governing bodies. Social protection systems have difficulties in accessing marginalized groups in situations of displacement and informal economies. Those without formal papers or a fixed address are often not registered on welfare rolls and thus further inequalities are exposed. So, although social protection can help to reduce injustice, if structural barriers are not taken care of, it can reproduce exclusion, depending on the type of social protection and how it is applied.

7.2 Human Rights Frameworks

Human rights frameworks offer a basis for action on injustice in the fields of poverty, stratification and displacement. International refugee law, especially the 1951 Refugee Convention and 1967 Protocol, creates legal obligations for states to 'take measures to safeguard' people who leave their home countries 'in order to escape... persecution. These frameworks are related to the rights refugees have to non-refoulement, legal protection and access to basic services. But they may not be relevant when applied to climate or development induced displacement, in which legal definitions are confused and controversial. The rights-based development approaches go beyond refugee law, to the idea that development policies should be based on universal human rights principles such as equality, dignity, participation and non-discrimination. This presents a different conception of development, which is no longer merely economic growth, but a way of increasing the substantive freedoms of the people (Sen, 1999). It also puts an emphasis on the responsibility of state and institutions in providing equitable access to resources and opportunities. Human rights frameworks, although having a normative impact, can be difficult to implement on the national level. Full implementation of rights-based commitments requires institutional capacity that is lacking in many countries, and/or political will. Consequently, protections in law are not necessarily protections in kind, and do not necessarily equate to betterment in the lives of people who are marginalized—such as displaced persons and the urban poor.

7.3 Governance, and the Reform of Institutions and Systems

Good governance systems and institutional reforms that increase accountability, transparency and inclusivity are needed in order for the responses to intersecting inequalities to be effective. Governance is the arrangement, institution and processes which determine how collective decisions are made and executed. As far as justice is concerned, governance defines the way resources are allocated, rights are respected and marginalised groups are integrated into decision-making. Improving accountability mechanisms is critical to ensuring public institutions are effective in addressing vulnerable populations' needs. This includes accountability of the judiciary, transparency of administration and anti-corruption mechanisms. Lack of accountability puts the effectiveness of social protection and human rights commitments at stake. Design of inclusive policy is of importance as well. Policies should be designed using participatory methods involving people from all social class, displaced people and the poor. Participatory governance increases the legitimacy and helps to make policies more relevant to people's lives by moving away from the idea that policies should be based on assumptions. Experience with development governance has demonstrated that inclusion increases the effectiveness of policies as it helps to ensure that interventions are tailored to local needs and contexts (World Bank, 2017). Administrative capacity, data systems and inter-agency coordination is also needed for institutional reform. Institutions that are fractured may result in policy duplication, inefficiency and gaps in delivery. The need thus arises for integrated systems of governance to tackle multidimensional inequality in a coordinated way.

7.4 Current Approaches Limitations

Even though there has been a lot of work done in the field of policy development to tackle poverty, stratification and displacement, there are significant gaps in the current approaches. The major constraint is the lack of coordination of government. Poverty, migration and inequality policies tend to be formulated separately, in various institutional areas. Fragmentation is a challenge to holistic responses to interconnected challenges and leads to policy incoherence. For instance, the social protection system might not be geared towards the migration policies, and therefore the displaced might not be covered by the social protection. A key challenge is one of policy implementation, between policy design and practice. Although many countries have positive laws and development policy, lack of institutional ability and lack of resources prevents effective implementation. This is especially true in less-resourced and weak states, where governance institutions may be stretched thin.

Political exclusion also helps to constrain institutional responses. Poor and displaced people and other marginalised groups are often excluded from political processes. This exclusion diminishes their power to affect policy agendas, and undermines democratic accountability. The policies may thus focus on the interests of the dominant social groups and ignore that of vulnerable groups. Also, there is unequal power dynamics in

the global governance set-up with policy priorities and directions of international institutions and donor agencies affecting the developing countries. This can result in policy models imposed from outside that fail to take into account local socio-economic realities.

8. Toward Transformative Justice

8.1 Concept of Transformative Justice

Transformative justice is not merely a form of justice that is mainly about the redirection of resources and/or compensation. Distributive justice focuses on the fair distribution of goods and opportunities, transformative justice aims to affect the distribution of goods and opportunities in the first place by focusing on the underlying conditions. It is based on the understanding that poverty, stratification and displacement are not unintended consequences but are actually products of historical, political and economic processes. In this sense, justice is not just about distributing equally, but changing social relations, institutions and power structures which create inequalities. This is because, according to Fraser (2008), justice requires three dimensions to be worked through together: redistribution, recognition and representation: there is no separability of economic inequality from cultural and political exclusion. Likewise, Young (1990) stresses that justice is more about the elimination of structural domination and oppression in institutional practices than about the rectification of unequal outcomes.

Transformative justice is especially pertinent in the context of global inequality as it speaks to the interconnectedness of disadvantage of marginalised populations. Poverty is not just an absence of income, but it is an absence of political participation, absence of social recognition and institutional protection. Thus, transformative justice demands a shift in the system and addressing the root causes of inequality instead of its symptoms.

8.2 Reimagining Inclusion

A key element of transformative justice is the rethinking of notions of inclusion in social, economic and political systems. Traditional policy approaches tend to think about inclusion as access to services or being included in existing institutions. Yet transformative approaches state that inclusion cannot be without meaningful participation in decision-making processes that affect those institutions. A key mechanism which can help reach this goal is participatory governance. This means, involving citizens, especially marginalized groups, in policy formulation, implementation and evaluation. Participatory models increase legitimacy and accountability as governance structures represent a variety of social experiences and not the interests of elites. A wide range of empirical research in the field of development governance has demonstrated that participatory methods help to enhance

the quality of policy interventions and contribute to better policy outcomes due to the integration of local knowledge and the minimization of implementation gaps (Cornwall, 2008). The inclusive governance also includes the dimensions of voice and representation. Poor, people in displacement and other socially marginalised groups are excluded from formal politics. Their needs and experiences are not seen by policy makers unless they are represented. To that end, there needs to be institutional mechanisms to amplify marginalized voices, including participatory budgeting, community-based organizations and inclusive electoral systems. In this way, inclusion is not symbolic, it needs to be substantive, and this means a shift in political power as well as economic resources.

8.3 Ethical Principles of Justice

The principle of human dignity is the basis of the ethical dimension of transformative justice. A human dignity is used as a guiding principle to assess social, political and economic systems. It states that every person has value, and that they deserve living conditions that enable them to live a meaningful and self-determining life. It is a principle at the heart of the international human rights systems, such as the Universal Declaration of Human Rights, which gives dignity as the basis of freedom, justice and peace. Equity-based development offers a concrete framework for making transformative justice a reality – beyond dignity. Equity takes into account the fact that various social groups need targeted supports based on their structural and historical disadvantage, rather than equality-based strategies which aim for the same supports across all groups. This is consistent with the 'capability' approach that focuses on broadening the substantive freedoms that individuals have to pursue valued ways of living (Sen, 1999; Nussbaum, 2011). Power imbalances within institutions and governance frameworks also need to be addressed in order to have equity-centred development. It resists the tendency towards thinking that the market or a technocratic solution alone can solve inequality. Rather, it highlights the importance of targeted policy action that puts the priorities on the marginalized and also addresses structural imbalances. Finally, transformative justice is the combination of moral principles and institutional change. Requires moral commitment to dignity and fairness, as well as practical reforms to alter the power dynamics, distribution of resources and opportunities in society.

9. Conclusion

This study has critically looked into the meanings and practices of justice in the intersecting dynamics of poverty, social stratification and displacement. As seen in the previous chapters, it is clear that justice can be neither understood as a one-dimensional legal nor distributive principle. Instead, it is a complex and relational condition determined by the combination of a series of inequalities, historical processes and institutional arrangements, which in turn influence access to dignity, rights and

opportunities. The analysis shows that poverty is not only a lack of income, but a multidimensional phenomenon of capability deprivation which reduces substantive freedoms and creates exclusion. Structural factors, including unequal economic systems, precarity of work and institutional protection frameworks and historical inequalities, are constantly perpetuating poverty, which in turn hinders individuals' access to justice. Parallel to this, social stratification systems are also institutionalized in education, the labor market and political institutions, generating hierarchies of citizenship, where the distribution of rights and services is uneven along class, gender, ethnicity and other identity lines. These inequalities are exacerbated by displacement, which has a negative impact on legal status, social belonging and economic stability. Displacement can create new vulnerabilities, which are not adequately addressed by the current legal frameworks, as in the case of conflict, climate change or development processes. This creates the “protection gaps” and documentation barriers which make the displaced populations structurally invisible in the formal systems of governance and justice. Importantly, the study has demonstrated the interdependence of the three dimensions—poverty, stratification and displacement. Rather, they overlap in such a way that their impact creates a cumulative disadvantage and increases exclusion over time. This intersectional lens shows how “invisible citizens” have come about, and that they remain invisible legally, politically and through data, thereby reinforcing their marginalisation. To address these challenges, the study points to the shortcomings of policy approaches that are sectoral and stresses the need for integrated governance approaches. Social protection systems, human rights institutions and reforms can be useful tools to reduce inequality, but they have limited effectiveness due to implementation deficits, political exclusion and structural fragmentation. Lastly, the concept of transformative justice highlights the need to shift from compensatory and redistributive to structural change. Transformative justice is based on the principles of human dignity, equity and participatory inclusion, and requires power relations and institutional structures to be reconfigured to end inequality. The overall result of this study is its contribution to the field of justice studies in the form of a relational, intersectional approach that binds poverty, stratification and displacement. It argues that, in order to attain 'justice' in the sense that matters, a re-thinking of the concept of inclusion, dignity and the organisation of access to rights in an unequal world is necessary, alongside the policy change.

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Chapter 24 : Spatial Inequality and Access to Education: A Socio-Geographical Analysis of the Digital Divide in Northeast India

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Abstract

This chapter examines the relationship between spatial inequality and access to education through a socio-geographical analysis of the digital divide in Northeast India. The study critically evaluates the expansion of digital technologies in education against the uneven geographical realities that continue to shape educational access across the region. Although digital platforms are often presented as tools of inclusion, the chapter argues that they frequently reproduce and, in some cases, intensify existing socio-spatial inequalities. The primary objective of the study is to analyse how geographical factors such as remoteness, infrastructural limitations, and regional disparities interact with socio-economic conditions to influence access to digital education. Particular attention is given to the challenges faced by marginalized communities in Northeast India, especially in Assam, where terrain, unstable connectivity, uneven resource distribution, and limited infrastructural development continue to affect learning opportunities. The study adopts a qualitative and analytical approach based on secondary sources, including government reports, academic literature, and policy documents, along with select regional examples to contextualize the discussion. The findings indicate that digital education in the region remains unevenly accessible, with clear disparities visible between urban and rural areas, as well as between core and peripheral regions. Problems such as unstable internet connectivity, shared digital devices, and limited digital literacy were found to significantly affect students in remote and riverine areas. The chapter concludes that digitally inclusive educational policies in Northeast India must move beyond general technological expansion and address region-specific infrastructural and socio-spatial challenges in a more geographically responsive manner.

Keywords: Social Geography; Digital Divide; Spatial Inequality; Educational Access; Northeast India; Digital Education.

1. Introduction

In recent years digital technologies have more and more been pushed as tools that will help change access to education, especially in areas which are in the midst of development. Numerous plans have been put in place to extend digital infrastructure and online learning platforms throughout India, and these plans have been media-hyped as measures to support inclusion and accessibility (Government of India, 2015; NITI Aayog, 2021). But, seen from a spatial perspective, a more disparate picture emerges. Geography, infrastructure and region-specific realities have to do with access to education which is not just a question of access to digital tools (Harvey, 2006; Soja, 2010). The links among terrain, connectivity and socio-economic factors are very intricate ones and this is particularly visible in the North-east India where the impact on the educational opportunities can be seen in complex manner.

This chapter tries to discuss the relationship between spatial inequalities with education from a socio-geographical angle with special emphasis on the digital divide in North-East India. The framing of digital education in the dominant discourse can point to advantages of the digital "learning gap" but there are also research studies that indicate that the deployment of the digital access is not equal. The framing of the potential advantages of digital education of overcoming long-standing limitations and inequalities often speaks of non-level digital expansion, as seen in studies by Van Dijk (2020) and by Warschauer (2003). Rather, it often reinforces and/or aggravates pre-established inequalities by working through processes of region, class and infrastructure (Castells, 2010; Norris, 2001).

This study, however, offers a unique example that is rarely examined, from the Northeast region. While many areas in the region still suffer from inconsistent digital connectivity due to difficult geography, scattered settlements, and infrastructural constraints, there are, however, indicators of improvement in these remote regions. There are some signs of the corresponding digital connectivity of these remote areas that is still difficult in terms of topography, sparsely populated settlements and infrastructural limits (Das & Das, 2020; Saikia, 2019). There are noted disparities between urban areas such as Guwahati and remote or riverine areas where the quality of internet connectivity is not assured in Assam and in some of its neighbouring areas which are not as well connected in terms of internet connectivity (Sharma, 2021; Barua, 2020). Spatial variation is a technical matter, but one that has a direct impact on educational participation/exclusion patterns.

These disparities clearly came into view as education moved online during the Covid-19 pandemic. These inequalities were particularly highlighted when education went online during Covid-19. Schools around India quickly shifted to a digital mode of

instruction, and many institutions took for granted that there was a level of access, which was not that uniform (UNESCO, 2020; Azim Premji University, 2021). One of the major problems faced by the students in many parts of Northeast is uncertain connectivity, inadequate digital devices, and digital illiteracy (Borah, 2021; Dutta, 2020). This aspect of digital exclusion was noted in Assam and neighbouring regions when students were forced to travel long distances to get to their online classes or had to find specific areas with internet connectivity to participate in classes (Saikia & Goswami, 2021).

Three main objectives are followed in this study: -

> **First,** it aims to explore how spatial inequalities foster unequal access to digital education at both inter-regional and intra-regional levels in the northeast region of India.
> **Second,** it examines the linkage between these spatial factors and socio-economic ones like income class, gender and rural/urban differences, which combine into multiple and layered disadvantages (Sen, 1999; Dreze & Sen, 2013).
> **Thirdly,** it seeks to break away from broad generalizations to discuss issues in light of the realities of any particular region, such as in Assam and the surrounding regions.

This study does not focus on the digital divide solely as a technological problem but rather is considered as a socio-spatial problem. This approach is based on a wider social geographical one with a focus on the imbalanced distribution of resources and the impact of the spatial organisation on social results (Massey, 2005; Smith, 2008). The concept of digital access is not simply that of connectivity, but the understanding that space, distance and regional development are part of a phenomenon that transcends access and creates equities for participation in education increasingly. The importance of this method is how it challenges easy stories of inclusion of the digital. In addition to infrastructure expansion, policy frameworks can neglect that different experiences of infrastructure may happen in different locations (Philip & Williams, 2019; Graham, 2011). Spatial constraints in the Northeast India, where geography is an engaging problem, cannot be separated. In spaces such as Northeast India, where physical geography is a building block, the efficiency of learning equals the significance of areas may not be separated.

It is also crucial to note that the Northeast is not one but several regions. Accessibility and exclusion aggregate across state, district, and even local levels, leading to a mosaic around the nation. The picture is even more vivid with Assam, where urban areas are not the less well connected, and flood-prone, geographically remote areas, with weak infrastructure systems, are well aligned. Spatial inequality as embodied in these

internal differences underscores the need to dig deeper into spatial inequality than crudely understood as rural–urban. The chapter opens with a discussion of the literature review and examines the spatial inequalities, digital inequality, and educational experiences of their participants and ends with a discussion of the methodology and some limitations. It then explores the character of spatial inequality and its implications for access to the digital world in Northeast India, before focusing on how spatial inequality impacts the educational process of participation. Later sections examine the wider implications of these results and offer some recommendations which are based on the region.

The aim of the chapter, in combining a geography with an approach to education, is to provide a grounded account of ‘digital inequality'. It is not that digital technologies are a failure, but they are uneven and they are influenced by the context in which they are put to use. This is a first step toward ‘social’ and ‘spatial' elements to be integrated with technological effectiveness in developing interventions.

2. Literature Review

Equality of access to education has long been a topic of conversation within various disciplines; other topics of conversation often do not focus primarily on the role of space and geography in shaping access to education. However, earlier discussions on inequality in education were more centered on economic or social factors, such as income, class and what was offered (Sen, 1999, Dreze & Sen, 2013). Though these are relevant, they have been complemented by more recent studies addressing the spatial aspect of inequality, Brazil included, which indicate that place can be an important determinant of real opportunity in the lives of people (Harvey 2006; Massey 2005).

The concept of a "space as medium" and its influence on social outcomes is often been discussed in Geography. The notion of unequal development is not a random phenomenon, but a result of the historical, political and economic processes creating unequal geographies (Smith 2008, Soja 2010). In this regard, access to education or lack thereof may be understood as a reflection of the wider territorial inequality, by which some territories are always poorer, for a variety of reasons, such as infrastructural refusal of certain areas or geographical barriers.

Meanwhile, with the advent of digital technologies, another layer was added to these conversations. The first reaction was to consider digital expansion as a case where inequalities will be lessened due to increased availability. This is, however, not a permanent state of optimism, as over time its validity is called into question. Previous research on the digital divide reveals a lack of balance in technology access (Norris, 2001; Warschauer, 2003; Van Dijk, 2020), and even for those who do have access, disparities in access, use, skills, and outcomes still exist. This implies that access to a computer is not the only criterion of inclusion: it is also a condition of connectivity.

The term Digital Divide has been strongly associated with prevailing socio-economic inequalities when considering the Indian context. A number of studies have identified persistent disparities in access to digital technologies in terms of income, education and geographical location (Graham, 2011; Philip & Williams, 2019). While the governments' efforts to connect the nation and to ensure an increase in the access to digital, the results of such initiatives have been mixed in the areas in tough terrain and/or less infrastructure setup (Government of India, 2015; NITI Aayog, 2021). This is seen more starkly when looking at areas other than urban centres, such as Northeast India.

Studies in the late 20th century specifically related to the problems of Northeast India underscore the problems here. Geographical conditions like hilly topography, scattered settlement and sensitivity towards the environmental changes are making it more difficult to develop and maintain digital infrastructure in the region (Baruah, 2005; Goswami, 2014). Research revealed that, apart from availability, reliability factors are crucial too, as the access is not continuous due to the frequent occurrences of connectivity problems (Das & Das, 2020; Saikia, 2019). Such circumstances led to the situation of digital access being fragmented, not being available completely and on a regular basis.

The COVID-19 pandemic has changed the way of talking about digital education. The digital divide increased as schools turned to virtual classrooms. The collision and expansion of the digital divide was more apparent and, often, more significant as schools transitioned to virtual classrooms. During this period, reports and studies across India highlighted that many learners failed to effectively engage with the online learning environment, primarily due to the absence of devices, inadequate connectivity signals or unsuitable learning environments (UNESCO, 2020; Azim Premji University, 2021). These were sometimes exacerbated by spatiological issues in the Northeast region of India. Not only was there a problem of access to digital platforms but in remote areas of Assam and neighbouring states, even basic connectivity was problematic, making attending classes difficult (Borah, 2021; Dutta, 2020).

Several little more elaborately with respect to these issues have been conducted in various parts of the country. The studies carried out in Assam suggest that the transition to digital learning has been fairly smooth in urban contexts, and while some challenges persist in rural or riverine settings, these problems are generally not as severe (Sharma, 2021; Barua, 2020). Shared devices and/or location-based travel have been necessities in some instances to ensure the availability of mobile networks, indicating the challenges of spatial inequality in everyday life (Saikia & Goswami, 2021). Such experiences indicates that digital education is not the same as it is in dismantling barriers, it can also create new barriers of exclusion. Another key body of literature takes the interaction between spatial inequality and social dimensions of inequality

(gender and income) as a focal point. Girls have, in fact, been found to be more likely to have access to digital devices where both parents and media representatives think these devices are less important to the family budget than other approaches (Sen, 1999; Dreze & Sen, 2013). Such inequalities are even more pronounced in areas of scarce resources, which further limits access to education.

Although significant research is emerging on digital inequality in general, there is a lack of research that combines social geography and education, and therefore, a focus on a region. The existing literature on the digital divide tends to focus at the national level and/or considers the issue of educational inequality but does not extend itself to incorporate spatial considerations. In Northeast India, though there is some research work focused on infrastructure constraint issues, there are not many to make the infrastructure problem a part of a broader socio-geographical matrix.

In this chapter, an attempt is made to bridge this gap, and social geographical perspectives and insights derived from the studies about digital inequality are juxtaposed with the specific context of Northeast India wherein focus is laid specifically on Assam. It does this by eschewing vague narratives and by implementing a more critical focus on the ways in which space, infrastructural structures and social contexts concur to influence educational opportunities elsewhere, often overlooked in broader debates, and even more neglected in this specific region.

3. Methodology

The present study adopts a qualitative and analytical method of understanding the impact of spatial inequality on access to education in the Northeast region of India. The analysis predominantly draws data from secondary sources including literature and policy documents, government reports, academic articles and published studies on the subject of Digital access and education. The focus of the study is regional, with special focus on Assam, to keep the discussion grounded in the realities on the ground. The study employs pattern analysis approach rather than a statistical approach, instead of what has been indicated in examples and reports in the existing literature. The method used is the Interpretive approach, in which data obtained from various sources are then analyzed based on geographical elements such as topography, traffic and location etc. The goal is to gain more insights into spatial context and potential of digital access and education opportunity in the various parts of the region. In general, this approach is to synthesize information resulted from a current availability, providing a complete and regionally-focused understanding of the digital divide in education.

4. Limitations of the Study

The subject matter presented in the study is intended to give a grounded perspective of spatial inequality and access to digital education, but at the same time, some limitations of the study must be emphasized.

1. One of the major problems is the use of secondary data. The study is not based on primary data, although it makes a good attempt with credible and updated-sourced information. The analysis is not based upon comprehensive experiences across Northeast India as a region but, rather, on reports and studies that are available, and may underrepresent the various experiences. With the internal differences across the region, this may be an underrepresentation of local realities.
2. Another constraint is the data one can access. Micro-regional data, e.g., districts or villages on access to digital information, and its detail, are limited. The information available is often consolidated in higher levels and this can sometimes hide lower levels, that contain important differences. This is especially true in the case of Assam, which may differ a great deal between urban centres, rural areas, river areas or flood prone areas.
3. Furthermore, this study specifically examines more of the structural elements of digital inequality that are related to infrastructure, spatial conditions etc. than the individual aspects examined in greater detail in the same study. Examples of, and observations on some aspects, have been incorporated in anticipation of context providing a better understanding of how such challenges are surfaced/navigated by individuals but in-depth field based research is required to provide a deeper insight into their navigation of such challenges.
4. Furthermore, there is a constraint imposed by the quick pace at which technological and policy transitions are created. The situation should be occasionally updated, as the digital infrastructure and education evolves. This means that some observations noted in this study could change over the course of time as new initiatives are initiated or work on filling in gaps.
5. Finally, while the chapter attempts to maintain a regional focus, Northeast India is not a homogeneous space. The emphasis on Assam provides a useful entry point, but it may not fully represent the conditions in other states within the region, each of which has its own specific challenges. Although Assam has been used as a primary regional reference point, the broader discussion reflects wider patterns observable across several parts of Northeast India.

The study was limited and the limitations themselves are not shown to be shortcomings of the study but rather put into a realistic perspective the findings of the study. It also

identifies areas for further research including that at the field and micro level that would help understand digital inequality in the region more fully.

5. Spatial Inequality and Digital Access in Northeast India

Spatial inequality is not uniform or one-dimensional in Northeast India but rather it occurs in a disjointed manner in terms of geographies, settlement and infrastructural penetration. Digital access when set in this space will become more apparent because of the unevenness. It's not just about the presence or absence of networks, but also the places where connectivity is present and those where it's lacking. Access is irregular and weak and also determined by geographic factors, particularly in peri-urban areas of the region as reported by (Das & Das, 2020) and (Saikia, 2019).

Here the physical environment greatly influences. The Northeast can be defined by hilly areas, lush vegetation and sparse communities making it difficult to scale stable digital infrastructure. In the mountainous area, the network towers often experience a signal glitch and only cover a small area. In a plain, the area serviced by network towers can be expanded more efficiently, but in a mountain it can be difficult to have a good signal and cover a wide area (Baruah, 2005; Goswami, 2014). Therefore, even with officially announced connectivity, the quality of connections and reliability is not consistent. This results in a situation of access only in theory and not in practice.

However, Assam is an exception in this overall regional trend. On the other hand, there have been improvements in digital connectivity at the urban level which can be seen in cities like Guwahati but there are still some areas in the rural and riverine part of the state that still have vulnerable network connections and constraints in accessing digital resources (Sharma, 2021; Barua, 2020). Over time the highways in Sub-Monsoon Areas have become unevenly accessible and are also subject to disruption due to flooding. Digital access varies across the landscape and works centres and lifestyles influence these patterns. Digital access distinctions have a direct impact on the devising of the patterns of digital access. Digital tools are integrated into daily life, used for communication and to access information and more recently for education, in stable areas of connectivity. The access to digital is, however, limited in areas with poor or intermittent connectivity. It might be due to various locations, certain moments of the day or even slight change in user behavior, such as moving to higher places, open spaces, etc. for a better signal (Saikia & Goswami, 2021). These can indicate access that's not equitable throughout the territory or across space.

There is a clear spatial inequality, and the rural–urban divide. Better infrastructure, availability of more bandwidth and satisfactory electricity supply, etc. are expected to ensure ease of digital access, which is a benefit to urban centres (NITI Aayog, 2021). However, rural areas may usually have a number of constraints at the same time, such as low device penetration, low digital literacy and weak network coverage (Philip &

Williams, 2019). These differences are not only technical; differences in Digital System use are a factor in how people can interact in a meaningful way. Meanwhile, an understanding of spatial inequality can't be limited to a rural–urban binary. Within and between rural areas there are differences according to the distance to towns, the road network accessed and local infrastructure. Villages can have varying levels of connectivity with highways and semi-urban areas versus areas far from highways and river banks - such as isolated villages of Assam (Borah, 2021; Dutta, 2020). It is an interesting multi-layered pattern, indicating digital inequality is present at various levels, both regional and local.

The link between infrastructure and socio-economic conditions is another aspect that can be observed in this regard. Households' affordability for use of digital devices or services may vary according to household income and priorities. For people living in resource-poor areas, the ability to own a smartphone or have access to Internet data use may be a challenge too far to leap (Sen, 1999; Dreze & Sen, 2013). Combined with spatial disadvantages, other groups will experience multiple disadvantages at once the compounded form of other disadvantages.

Policy measures have sought to plug these gaps, notably with policies for building digital infrastructure. But, the results have not always been conclusive. Despite progress in some aspects, some districts experienced two-thirds of the benefits of these improvements, whilst the remaining third were experiencing none (Government of India 2015; Graham 2011). In many instances it has been easier to expand the infrastructure in convenient places, and it is still falling behind in inaccessible and tough areas. This is not only true for this project; it is usually a rule, not an exception, that development follows (or follows more often than it breaks away from) previous habits or patterns of development. These spatial divides were further laid bare during the COVID-19. The demand for digital platforms have become sharper with its limitations due to the increased dependency. It was challenging for students and families in less well connected regions to have regular access and access, which ethically and practically have been unequal to policy assumptions before and since the pandemic (UNESCO 2020, Azim Premji University 2021). These problems proved to be lasting in Northeast India; more so, in parts of Assam where they were a display of more underlying structural problems related to geography and infrastructure.

Overall, these observations indicate that the access to digital services in Northeast India is related to both spatial and socio-economic elements many of which are entangled and difficult to unravel. Being connected is not simply about the best that technology can offer; it is part of a larger geographical context which can affect access to connectivity and how it is accessed where and when. It is important to grasp this spatial aspect and any discussion of digital inclusion in the region is incomplete without it.

6. Education and the Digital Divide in the Region

Digital technologies' use in education has been hailed as a means to promote access and mitigate the enduring inequalities. In theory, technology solutions such as online learning, digital classrooms, and mobile learning seem to be able to connect learners regardless of distance to be bridged. This shifts, however, would seem less homogenous when looked at from a spatial perspective of Northeast India. The fact that so many children have access to technology is not the only determinant of access to digital education however, as are the conditions in which technology becomes usable. It is a bundle that reminds one of the challenges that have become clearer due to the COVID-19 pandemic. While all the educational institutions went into online learning during the pandemic period, a basic assumption prevailed i.e., the students will have access to some device, internet and a learning environment that is fit for virtual learning. This was not true in most regions in North East India.

Based on these studies, it is found that quite a few students were not fully engaged with digital learning either due to lack of infrastructure, or because of economic constraints during this period (Azim Premji University, 2021; UNESCO, 2020; World Bank, 2020). These differences were clearly reflected in spatial context in the state of Assam. While the situation was more conducive to virtual learning in urbanised areas with more stable connectivity and widespread reach of digital devices, some urban areas, like Guwahati, were comparatively in a better position for virtual education. This was in contrast to students in rural and riverine areas who had ongoing difficulties. Regular participation in online classes was challenging due to weak network connectivity, frequent disruptions in online connectivity and less availability of communication devices such as smart phones/computers (Sharma, 2021; Barua, 2020).

Additionally, in some cases, students relied on one device that was shared within the family, thus limiting students' opportunities to participate regularly in digital learning. The challenge of simple access to the device or connectivity is not the issue, however. Basic access does not exist everywhere, and quality is lacking. In unstable networks, classes can be interrupted, interaction takes place is reduced and overall effectivity of learning is lessened. This often leads students to be ‘technically connected’ but the end result may not facilitate their meaningful participation (Dutta, 2020; Borah, 2021). This limited access is an indication of a deeper dimension to the digital divide which is one that concerns quality and usability, instead of simply availability. The characteristics of these outcomes remain to be largely determined by the geography. The same is true in Northeast for maintaining the stable internet connectivity which is a challenge in the North East in hilly or distant areas in the absence of infrastructure or environment (Das & Das, 2020; Goswami, 2014). In such areas, students residing might need to adjust to particular hours, days or places of the relatively stable network connection to attend an

online class or even relocate to certain specific areas where network connections are available (Saikia & Goswami, 2021).

The need to learn within a spatial context is part of these conditions that is seldom taken into consideration when discussing learning in a broader policy context. Layered inequalities are generated at the same time by conditions of socio-economics and spatiality. The households with scarce incomes might not be able to afford their multiple devices or ongoing Internet data limit, thus further constricting access (Sen, 1999; Dreze & Sen, 2013). In such settings, education may not be a shared experience, with some prioritized over others; the latter may be suggested, but not requested or followed through. This can also affect gender as well, with access to electronic devices potentially not being shared equally amongst family members.

Some of these gaps have been tried to be overcome through digital education promotion policies by the government. Availability of OEC has been increased through platforms/policies under broader programmes, as outlined below (Ministry of Education, 2020; Government of India, 2015). When measured on a regional basis there are, however, yet some uneven outcomes from the initiatives in terms of effectiveness. This might be helpful in areas of substantial connectivity. Their reach is still restricted in areas where the availability of access is not certain. This is an expression of the policy mismatch that exists with spatial reality. The theme of digital literacy in this context is another facet that comes up. Freedom of access to devices and networks does not necessarily mean the device is being used effectively. In areas of low digital uptake, it is possible that students and teachers may have further to make the transition to an online learning environment (Warschauer, 2003; Van Dijk, 2020). The lack of awareness and capabilities are exacerbated in Northeast India where digitalization has not been uniform.

In addition, it is crucial to understand that the consequences of digital inequality will not be short-lived. Disruptions in access at key learning moments can erode learning, engagement and may lead to drop out in some cases. From the date of the pandemic onwards, long interruptions of learning reached more disadvantaged students disproportionately (World Bank, 2020; Azim Premji University, 2021). These effects may be more severe in areas such as Assam where there are spatial and socio-economic issues to begin with.

All of these patterns tell us that digital education may bring possibilities to us, but does not automatically make us more inclusive. Rather, it happens in the already existing spatial and social regime, which still determines who is in and who is out. In the context of Northeast India, specifically Assam, gaining access to the digital learning environment is a complex issue and is multifaceted in the sense of affected outcome due to different factors involved in the space geography, infrastructure, and

socio-economic. This multiple levelness of inequality will need to be understood in order to progress beyond the present conditions of digital education. If the spatial dimension that influences access is not taken into account, access to digital learning could continue to disadvantage some groups more than others with digital learning, while maintaining overall disadvantaged disparities.

7. Discussion

The digital divide in the Northeast is not independent of the division of other developmental processes but it is interwoven with division in other dimensions of development as well; in some instances, the digital divide seems to accentuate the existing gaps in other developments. The case of Assam and the region of Assam places into doubt the concept of digital inequality as being merely technical. It has been influenced by the location of people, the distribution of infrastructure and the environment which they live in and work with on a daily basis (Harvey, 2006; Massey, 2005).

One thing that's different is between “availability’’ and “availability for use”. In areas with weak networks or limited electricity access, access is of limited certainty and experience. This disconnect between provision and practice has been mentioned in the wider debates about the digital divide in which a difference between access and meaningfully participating has been recognized (Van Dijk, 2020; Warschauer, 2003). This difference, when applied to Northeast India is even more apparent due to the geographical conditions of this region. There is also mention in the discussion of the need for a more targeted approach in digital education that is not universal. Challenges occur when policies are prepared and adopted at the national level and assume a fairly uniform infrastructure as this is not the case on the ground in each region (Government of India 2015, NITI Aayog 2021).

The imbalance in this baseline is reflected in the city of Guwahati, Assam relative to remote areas or riverside areas in the state. Some students can interact with digital platforms relatively easily while others partially interact or, more rarely, don't interact at all. This is not a random feature but it is a manifestation of greater spatio-temporal inequalities that have been created over time (Smith, 2008; Soja, 2010). There is another important aspect of spatial inequality, and it's in relation to socio-economic conditions. In addition to limited resources at the household level there are also weak infrastructure which adds layers of disadvantage. The access to networks is available consistently where networks are readily available, which requires affordability and availability of devices (Sen, 1999; Dreze & Sen, 2013). But in the face of this, access to education is not a given within communities and households, and often uneven across the regions. This creates another dimension of the digital divide and is a space and a social gap.

To some extent, the pandemic was a stress test of the current system. It made visible these inequalities that did not arise out of it. The gaps which used to be much less visible, now became focal points in learning. In some areas, the disadvantage associated with the lack of a regular internet connection or devices was evident as soon as the students were exposed to less than optimal geographic characteristics or conditions (Azim Premji University, 2021; UNESCO, 2020), particularly in Northeast India. The streams of movement that were fine on a day-to-day basis went crooked in some places and became more long-term, especially where infrastructure was already strained.

It is equally a mistake to think that the digital education hasn't brought anything good. Digital platforms have enhanced accessing learning material and offered new opportunities to the students in better connected areas of Assam and other states. But not all these benefits have been equally recognised. What is seen is a process of ‘selective inclusion' of some groups and not others, who are able to benefit from digital opportunities, while others are left on the margins (Graham, 2011; Philip & Williams, 2019). This skews the distribution and brings up a bigger question, as to how digital inclusion is understood. When the measure of inclusion is simply the increase in infrastructure, then the situation could look brighter than it actually is. If assessed in respect to regular and purposeful engagement in learning activities, however, the gaps become overwhelming. To achieve this participation, it is not enough to extend networks, but important that a bodily dimension to how the networks work be confronted. Such participation in Northeast India demands much more than just extending networks, in fact there is also a need to confront a bodily dimension of how these networks operate on the ground.

In summary, it returns us to our main idea: Digital education is not a nothingness. It is influenced by the similar spatial and social forces at play with other types of development. As digital technology advances, these forces continue to generate inequities, especially in Northeast India, and in Assam. All this does not affect the digital education potential, rather, it draws particular attention to the need to approach it more carefully. Rather than technology, which will automatically achieve a more equal society, it may be more important to understand present circumstances and the changes needed for technology to become truly inclusive. This involves more focus on the infrastructure, local context and real life challenges of access in such a place where geography is so important. If otherwise, it seems the divide between those who could benefit and those who could not from digital education will continue to exist.

8. Recommendations of the Study

Digital education in Northeast India cannot become inclusive through general policies alone. Therefore, any effective intervention must take these regional and geographical differences into account rather than assuming that all areas face the same conditions. The following recommendations are suggested to address the challenges of digital inequality and improve access to education in Northeast India.

1. One immediate need is last-mile connectivity particularly in remote and hilly areas. Capacity of waiting with only infrastructure expansion is not enough, rather local network solutions should be created to be able to operate on difficult terrain. In some dispersed and isolated areas of Assam, new models of internet connectivity like community-based Internet points and shared access centre of digital facility may be more effective than the traditional models (Das & Das, 2020; Goswami, 2014). These are not all solutions, but help to minimize the need for constant personal connections.
2. Another matter which requires a more empirical answer is the question of device access within households. In rural/riverine communities, many students utilize one device shared by several users lessening digital learning involvement (Borah, 2021; Dutta 2020). Any policies that are solely targeted at content delivery do not address this limitation. Instead of this, a better solution would be to use targeted support for the devices, especially among the economically weaker households of students. It might happen in connected and coordinated channels within the school or the promotion of a targeted system that depends on local considerations, rather than a set of entrenched eligibility requirements (Sen, 1999; Dreze & Sen, 2013).
3. The reliability of electricity supply and network also should be taken into account. In Northeast India, not only are interruptions to power supply disrupted, but the lack of electricity can be a major problem for the use of digital platforms in some areas of the region. Consistent and reliable connectivity is hard enough to come by, without stable electricity. This calls for coordination between sectors – with an improvement in digital infrastructure, parallel investments should be made in building a sustainable power supply, particularly for rural and flood prone areas (Planning Commission of India, 2014).
4. A more grounded intervention would be focused on creating resources for ‘offline' learning. While there are some settings where online learning is fully connected, it is unrealistic to think students can be fully engaged on any learning platform that is not online. Content which can be downloaded and accessed without an internet plan can be used here, such as preloaded content, low data applications or periodical synchronisations. These include broader work on ideas around digital learning such as in areas of low infrastructure

(World Bank, 2020; UNESCO, 2020), and seem most relevant to the context in the Northeast.

5. Digital literacy should be given further consideration as well—which is true, but needs to be done with consideration to the context, as with everything else. For students, as well as teachers training programmes, it cannot be assumed that they have prior knowledge on digital tools. Gradual and locally adapted training that in other locations has been limited can have a positive impact on the utilization of available resources in effective ways (Warschauer, 2003, Van Dijk, 2020). If we fail to do this, we can even fail to achieve any educational engagement when we invest in better infrastructure.
6. The process of policy planning should go beyond the notion of generic surrogates for success, at a higher level. Just the point of cover/count of connections can be misleading when measuring success. Rather, it is necessary to measure the quality of access such as stability, usability and involvement in learning processes. This change in thinking has been highlighted in terms of digital inequality, in which outcomes are equally as important as access (Graham, 2011; Philip & Williams, 2019).
7. Finally, there is good argument for decentralized and local planning. Northeast India is not a uniform region and within Assam there is high variation between districts. Variations in state or district wide approaches to implementing digital education initiatives can be better served through flexible, state and/or district design options. Knowing the ground realities is better by local institutions as they can make the changes of the intervention according to that. (Baruah 2005).

Put together these recommendations suggest a debate towards a more practical approach on digital inclusion, where spatial variations are not being ignored but addressed. It is not the digital education, but making it more feasible in the real context in which it takes place. If these adjustments are not made, there is a danger of the digital expansion continuing to work favour to some and not so much to others.

9. Conclusion

The purpose of this chapter was to explore the territorial inequality and access to education particularly digital divide in the Northeast Indian context. It only becomes apparent in the discussion that digital access has to be seen through a geographic lens. Diffusion of digital technologies in education has not been uniform; rather, it has mirrored the uneven development of education itself, and the inequities common amongst the region.

The inequities experienced by each with regard to Northeast India and indeed the state of Assam are very concrete. The universality of experience is not just a matter of degree; it's also a matter of being urban and rural! Some students can in part or as a

whole gain access to digital learning without a major hurdle, whereas others can only do so in part or are even completely blocked. It involves an interplay between structural, institutional, economic and terrain factors that impact the access to digital education in its actual practice (Das & Das, 2020; Sharma, 2021).

Results presented in this chapter confirm that the "digital divide" in the region is not solely an issue of lack of connectivity but of its instabilities and low quality. Access is present but not reliable everywhere and it is hard to achieve regular access to online education. The question of greater availability and less usability is especially relevant when thinking about the lack of uniformity in outcomes of digital initiatives (Van Dijk, 2020; Warschauer, 2003). At the same time the discussion concentrates on the close relationship of spatial inequality and the socio-economic conditions. The problem of unequal usage of technology in the household as well as differential access to technology for entertainment and communication, combined with limited access to learning opportunities, and differential digital literacy, additionally curtails educational access, typically exacerbating the existing disadvantage (Sen, 1999; Dreze & Sen, 2013).

These intersect with other geographical conditions found in Assam, including areas which are flood prone and the scattering of settlements, making it impossible to provide general solutions. These issues have only been highlighted in this pandemic, but not caused by it, with the passage to online learning. Instead, it revealed seams of structural deficits, which were not so obvious earlier. The use of digital platforms highlighted the spatial criticality of access to education in the region, as well as the need to have learning spaces that are flexible, adaptable, and ‘situated’ to account for local realities (UNESCO, 2020; Azim Premji University, 2021). One of the most important findings of this research is that policies on digital inclusion should be more than just loose concepts and take regional differences more to their heart in a more direct way. It involves recognizing the influence of the topography, housing organization, and constraints on physical facilities in Northeast India on access. Otherwise, an unbalanced development of digital education may prevail, the disadvantage of which would be that some areas would benefit more from the expansion while others would not.

This chapter also implores thoughts regarding the change in the concept of digital inclusion. Not only is there a need to think about adding connectivity, but how might it lead to real and lasting engagement from learning? But the difference between being connected and being able to learn effectively can be great in areas where the ability to connect is spotty or unequally dispersed. Finally, it can be argued that although digital education has great promise, it is the place in which it is practised that determines what it realizes. It is in these areas that geographical issues and heaps of uneven development in Northeast India, especially Assam can't be overlooked. In order to

tackle the digital divide in education, however, it is not enough to just expand the technology but it is necessary to have a more pragmatic and locally informed thinking that is plugged in up to, and not past, local conditions.

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Chapter 25 : Digital Divide In The Age Of Social Media: Implications For Education And Society

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Abstract

The rapid expansion of digital technologies and social media has transformed how people communicate, learn, and access information. However, these benefits are not shared equally, giving rise to what is known as the digital divide. This chapter examines the digital divide as a multidimensional issue that goes beyond access to include differences in digital skills, usage, and the ability to benefit from technology. Social media platforms offer opportunities for knowledge sharing, collaboration, and informal learning, yet unequal access to these tools creates new forms of exclusion. Recent estimates show that about 67% of the global population uses the internet, while nearly 2.6 billion people still remain offline. In addition, more than 60% of the world's population uses social media, but access remains uneven across regions and socio-economic groups. These disparities are particularly evident in education, where students without digital access face limited learning opportunities compared to those with access to online resources and digital tools. The chapter also highlights the rural–urban dimension of the digital divide, especially in developing countries like India, where infrastructure gaps and low digital literacy restrict participation in the digital ecosystem. Furthermore, the growing use of artificial intelligence in education introduces a new layer of inequality, as advanced tools are often accessible only to digitally advantaged groups. The chapter concludes that bridging the digital divide requires a comprehensive approach that includes improving infrastructure, promoting digital literacy, and ensuring inclusive policies. Equal access to digital technologies is essential for achieving inclusive education and sustainable social development.

Keywords Digital Divide, Social Media, Education, Inequality, Artificial Intelligence, Rural–Urban Gap

1. Introduction

Digital technologies have become an essential part of modern society. The widespread use of the internet and social media platforms has changed how people communicate, learn, and access information. Social media applications such as Facebook, YouTube, and WhatsApp are now commonly used for sharing knowledge, interacting with others, and accessing educational content. These developments have created new opportunities for individuals and communities. According to the International Telecommunication Union (2023), approximately 2.6 billion people worldwide remain offline, indicating persistent inequalities in digital access. Global internet penetration has reached around 67% of the population; however, access remains uneven across regions and socio-economic groups.

However, the benefits of digital technologies are not equally available to everyone. A significant portion of the global population still lacks access to digital devices, reliable internet connectivity, and digital skills. This inequality is referred to as the digital divide. The digital divide is not only about access to technology. It also includes differences in digital literacy, skills, and the ability to use technology effectively. In the context of social media, this divide becomes more complex because people with better skills and access can benefit more from digital platforms, while others remain excluded.

This chapter focuses on understanding the digital divide in the age of social media and its impact on education and society. It examines how digital inequality affects learning opportunities, social participation, and overall development.

2. Literature Review

The concept of the digital divide has been widely studied across disciplines, particularly in the context of rapid technological advancement and increasing dependence on digital platforms. Early studies primarily focused on inequalities in access to information and communication technologies (ICTs), while recent research has expanded the concept to include disparities in digital skills and usage outcomes.According to Jan van Dijk (2020), the digital divide is a multidimensional phenomenon that includes not only access to technology but also differences in digital skills and the ability to use digital resources effectively. This perspective highlights that digital inequality is deeply rooted in broader socio-economic structures rather than being a purely technological issue. This perspective is also supported by Helsper (2021), who argues that digital inequality is closely linked to social and structural factors.

Similarly, Mark Warschauer (2004) emphasized that access alone does not ensure social inclusion. He argued that meaningful participation in the digital society requires

a combination of physical access, digital literacy, and social support systems. This shift from access-based to capability-based understanding has been central to recent digital divide research.

In the context of social media, Neil Selwyn (2016) examined how digital technologies influence education and society. His work suggests that while social media platforms create opportunities for learning and engagement, they also reinforce existing inequalities. Individuals with higher digital skills are more likely to benefit from these platforms, whereas others remain excluded.

Recent studies have further expanded the discussion by introducing the concept of "digital inequality." Hargittai (2021) highlighted that differences in digital skills and online behaviour significantly affect how individuals benefit from internet use. This indicates that even when access is available, inequalities persist due to variations in digital competence.The impact of the digital divide on education has been widely documented. Reports by UNESCO (2023) indicate that a large proportion of students globally lack access to digital devices and reliable internet, which limits their participation in online learning. The COVID-19 pandemic further exposed these disparities, as many students were unable to continue their education due to digital constraints.

Similarly, OECD (2023) emphasizes that students from disadvantaged socio-economic backgrounds are more likely to experience learning loss due to limited digital access and skills. The organization highlights that digital inequality contributes directly to educational inequality, affecting long-term outcomes.In recent years, the emergence of artificial intelligence (AI) has added a new dimension to the digital divide. UNESCO (2024) introduced the concept of the "AI divide," referring to inequalities in access to advanced digital technologies. The report suggests that while AI has the potential to enhance education, it may also widen existing inequalities if access remains uneven.

Furthermore, studies focusing on rural–urban disparities highlight that geographic location remains a key determinant of digital access. Research indicates that rural populations often face challenges such as poor infrastructure, limited connectivity, and low digital literacy, which restrict their participation in the digital economy.

Overall, the literature suggests that the digital divide is a complex and evolving phenomenon that intersects with social, economic, and educational inequalities. While digital technologies and social media offer significant opportunities for development, unequal access and capabilities continue to limit their benefits. Therefore, addressing the digital divide requires a comprehensive approach that includes infrastructure development, digital literacy, and inclusive policies. The concept of digital capital further explains how access and skills influence individuals' ability to benefit from digital technologies (Ragnedda & Ruiu, 2020).

The above review of literature indicates that the digital divide is a multidimensional issue influenced by socio-economic, technological, and educational factors. However, there is a need to further examine its implications in the context of social media and emerging technologies, which are discussed in the following sections.

3. Conceptual Framework of Digital Divide

Building on this understanding, the digital divide can be viewed as a multidimensional concept that has evolved beyond mere access to digital technologies. Earlier, it was primarily associated with the availability of computers and internet connectivity; however, recent studies emphasize that it also includes differences in skills and usage.

The digital divide can be understood through three key dimensions

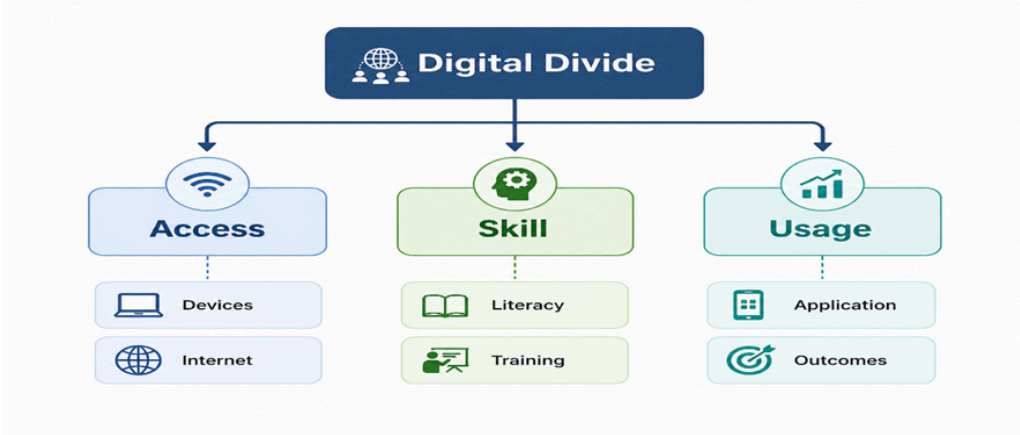


Figure 1: Conceptual Framework of Digital Divide (Access–Skill–Usage Model)

Figure 1 illustrates that the digital divide is a multidimensional concept consisting of access, skill, and usage dimensions.

• **Access divide:** Differences in the availability of internet connectivity and digital devices

• **Skill divide:** Variations in digital literacy and the ability to use technology effectively

• **Usage divide:** Differences in how individuals utilize digital technologies for productive and meaningful purposes

These dimensions highlight that digital inequality is not limited to access alone but also depends on individuals' ability to effectively use digital technologies. They are influenced by factors such as income, education, location, and social background (van Dijk, 2020). For instance, individuals in urban areas generally have better internet

access compared to those in rural areas, while higher levels of education are often associated with greater digital competence.

The Organisation for Economic Co-operation and Development (OECD, 2023) further emphasizes that digital inequality is closely linked to broader social inequality. This suggests that socially and economically disadvantaged groups are more likely to experience digital exclusion. Thus, the digital divide represents a multi-layered form of inequality shaped by socio-economic, educational, and technological factors.

4. Role of Social Media in Contemporary Society

Social media has become a significant component of contemporary society, influencing communication, information sharing, and social interaction. It enables individuals to connect across geographical boundaries and provides access to a wide range of knowledge and learning resources. Recent estimates suggest that more than 4.8 billion people worldwide use social media platforms, accounting for over 60% of the global population (DataReportal, 2024). However, the benefits derived from these platforms are not uniform, as effective usage depends on users' digital skills and access.

4.1 Positive Aspects

• Social media facilitates rapid dissemination of information

• It supports informal learning through videos, blogs, and online discussions. Social media plays an important role in supporting both formal and informal learning environments (Greenhow & Lewin, 2016).

• It enhances connectivity and interaction across diverse communities. Social media can improve student engagement and collaborative learning outcomes (Tang & Hew, 2022).

4.2 Negative Aspects

• Spread of misinformation and fake news

• Increased screen time and digital dependency

• Unequal benefits due to disparities in access and digital skills

Research indicates that access to social media alone does not ensure equal outcomes. Individuals with higher levels of digital literacy are better able to utilize these platforms for learning and development, whereas others may face limitations (Selwyn, 2016). Thus, the impact of social media is uneven, as its benefits depend on users' digital skills, access, and ability to utilize these platforms effectively. It can both reduce and reinforce existing inequalities. These observations highlight the need to

examine how digital inequality influences educational opportunities, which is discussed in the following section.

5. Digital Divide and Education

Education is one of the most significantly affected areas of the digital divide. Digital inequalities continue to affect access to quality education across different socio-economic groups (Niemann & Selwyn, 2023). Digital technologies have created new learning opportunities through online platforms, e-learning tools, and digital classrooms. In India, government initiatives such as DIKSHA (Digital Infrastructure for Knowledge Sharing), SWAYAM (Study Webs of Active Learning for Young Aspiring Minds), and e-Pathshala have expanded access to digital learning resources for students and teachers.

However, access to these opportunities remains uneven. According to UNESCO (2023), nearly 50% of students worldwide do not have access to a computer at home, and many lack reliable internet connectivity. This limits their ability to participate effectively in digital learning environments.

Opportunities

• Access to a wide range of online educational resources

• Availability of massive open online courses (MOOCs)

• Flexible and self-paced learning opportunities

• Use of multimedia tools to enhance understanding

Challenges

- Lack of access to digital devices and internet connectivity
- Low levels of digital literacy among students and teachers.
- Technological and infrastructural barriers effective online learning experiences. (Rahiem, 2021).
- Differences in learning outcomes across socio-economic groups

The impact of the digital divide became more evident during the COVID-19 pandemic, when many students were unable to attend online classes due to limited access to digital resources. Studies indicate that students from disadvantaged backgrounds are more likely to experience learning loss due to digital inequality (OECD, 2023).

The impact of the digital divide on education can be better understood through the following comparison:

Table 1: Impact of Digital Divide on Education

Aspect	With Digital Access	Without Digital Access
Learning Resources	Access to online courses, videos	Limited to textbooks
Learning Flexibility	Flexible and self-paced learning	Fixed classroom learning
Skill Development	Enhanced digital skills	Limited digital exposure
Academic Performance	Improved outcomes	Lower performance levels

The table clearly shows how unequal access to digital resources leads to disparities in learning opportunities and outcomes. Overall, limited access to digital technologies restricts students' participation in online learning and contributes to unequal educational outcomes, reinforcing existing socio-economic disparities.

6. Rural–Urban Digital Divide

The rural–urban divide is a significant dimension of the digital divide, reflecting disparities in access to digital infrastructure and services. Urban areas generally benefit from better internet connectivity, availability of digital devices, and higher levels of digital literacy. In contrast, rural areas often face infrastructural limitations, limited resources, and lower awareness of digital technologies. Studies indicate that internet penetration is considerably lower in rural regions compared to urban areas, primarily due to these constraints (World Bank, 2023).

In rural communities:

• Internet access is often slow, unreliable, or unavailable

• Levels of digital literacy are comparatively low

• Access to educational and informational resources is limited

These disparities also affect rural livelihoods. For example, farmers may have limited access to timely information on weather conditions, market prices, and modern agricultural practices. Although digital tools and social media have the potential to support agricultural extension services, their impact remains uneven due to restricted access.

Addressing the rural–urban digital divide is essential for promoting inclusive development and improving socio-economic outcomes. This issue is particularly relevant in developing countries such as India, where disparities in infrastructure and digital access remain pronounced, as discussed in the following section.

7. Digital Divide in India: Trends, Challenges and Policy Initiatives

India has witnessed rapid digital transformation in recent years, driven by increasing internet penetration, smartphone usage, and government initiatives such as Digital India. With over 750 million internet users, the country represents one of the largest digital markets globally; however, disparities in access continue to persist (Government of India, 2022). The digital divide in India is evident across rural–urban, gender, and socio-economic dimensions.

Although internet usage has grown significantly, a considerable section of the population still lacks reliable digital infrastructure (International Telecommunication Union, 2023). Data from the Telecom Regulatory Authority of India (2023) show that internet penetration is substantially higher in urban areas than in rural regions, reflecting a persistent rural–urban gap.

This divide has direct implications for access to education, information, and economic opportunities. In rural areas, limited connectivity, lower availability of digital devices, and reduced digital literacy restrict effective participation in the digital ecosystem. The National Sample Survey Office (2021) reports that rural households have significantly lower access to computers and internet services compared to urban households.

In the Indian context, the digital divide also affects rural livelihoods and youth engagement. Limited access to digital technologies restricts farmers' and rural youth's ability to access timely information, digital advisory services, skill development platforms, and employment opportunities. While social media and mobile-based applications have the potential to support knowledge dissemination and capacity building, their benefits remain uneven due to disparities in access, affordability, and digital literacy. This highlights the need for inclusive digital policies that address not only access but also skills and opportunities.

Another important dimension of digital inequality in India is the gender gap. Women, particularly in rural areas, are less likely to have access to digital devices and internet services. This limits their participation in education, employment, and social interaction, thereby reinforcing existing inequalities.

The impact of the digital divide is also evident in the education sector. During the COVID-19 pandemic, the shift to online learning exposed significant gaps in access to digital resources. Many students, especially from rural and economically weaker backgrounds, were unable to participate effectively in online education, leading to learning losses (UNESCO, 2023).

To address these challenges, the Government of India has implemented several initiatives under the Digital India programme. These include expanding broadband connectivity in rural areas, promoting digital literacy through schemes such as Pradhan

Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA), and encouraging the use of digital platforms for education and governance. Despite these efforts, challenges related to access, affordability, and digital skills continue to persist.

Overall, the digital divide in India reflects broader socio-economic inequalities and remains a significant barrier to inclusive development. Bridging this gap requires a comprehensive approach that integrates infrastructure development, digital literacy, and inclusive policy interventions.

8. Artificial Intelligence and Technological Change

Artificial intelligence (AI) is emerging as a key driver of digital transformation, particularly in the field of education. Overall, limited access to digital , automated assessment, and data-driven decision-making. AI-based systems have been shown to enhance personalized learning and improve educational efficiency (Holmes et al., 2019; Luckin et al., 2016). However, access to AI-based educational tools is often concentrated among digitally advanced users, raising concerns about a growing "AI divide" (UNESCO, 2024).

Benefits

• Customized and adaptive learning experiences

• Improved efficiency in teaching and assessment

• Enhanced access to information and learning resources

Constraints

• Unequal access to AI technologies

• Limited skills required to use advanced digital tools

• Risk of widening existing inequalities

UNESCO (2024) highlights that while AI has the potential to improve educational outcomes, it may also deepen inequalities if access remains uneven. This emerging "AI divide" underscores the importance of ensuring equitable access to advanced technologies. In this context, the Indian experience demonstrates how digital inequality is shaped by socio-economic and geographic factors, reinforcing the need for inclusive policies and targeted interventions.

9. Societal Implications of Digital Divide

The digital divide has a wide impact on society. It affects not only education but also economic opportunities, social participation, and access to services. (Robinson et al., 2020). The digital divide also influences civic participation and access to

information, particularly among disadvantaged groups (Norris, 2001).The Studies indicate that individuals without digital access are at a higher risk of social exclusion, as they are unable to participate fully in digital services, employment opportunities, and online communication (World Bank, 2023).

Positive Impacts of Digital Technology

- Better communication
- Access to information
- Opportunities for innovation

Negative Impacts of Digital Divide

- Social exclusion
- Economic inequality
- Limited access to services

Studies show that digital inequality can lead to broader social inequality (van Dijk, 2020). People who lack digital access may miss opportunities for education, employment, and social engagement.

10. Challenges in Bridging the Digital Divide

Several challenges make it difficult to reduce the digital divide:

- Lack of infrastructure in remote areas
- High cost of internet and devices
- Limited digital literacy
- Inadequate policy implementation

Addressing these challenges requires coordinated efforts from governments, institutions, and communities.

11. Way Forward and Recommendations

To reduce the digital divide, the following steps are important:

- Improve digital infrastructure in rural areas
- Provide affordable internet and devices
- Promote digital literacy programs

- Integrate digital tools in education
- Strengthen extension services

Policies should focus on inclusion and equal access to digital technologies.

12. Discussion

The analysis presented in this chapter shows that the digital divide is not only a technological issue but also a reflection of broader socio-economic inequalities. Although digital technologies and social media have expanded access to information and learning, their benefits remain uneven across different groups of society. A key observation is that increased digital access does not automatically lead to equal outcomes. Individuals with better digital skills, higher education, and stronger infrastructure are able to use digital platforms more effectively. In contrast, others face limitations in accessing and utilizing these technologies. This creates multiple layers of inequality, where differences exist in access, usage, and outcomes.

In the education sector, these disparities have important implications. Students with adequate digital resources are better able to participate in online learning, while those without access experience significant disadvantages. This gap became particularly visible during the COVID-19 pandemic, which highlighted the unequal distribution of digital resources.

The Indian context further demonstrates how digital inequality is influenced by geographic location, economic conditions, and social factors. Rural populations and economically weaker sections often face barriers in accessing digital technologies, which limits their participation in education, employment, and social development. This also affects rural youth, whose access to digital opportunities remains uneven.

In addition, the growing use of artificial intelligence introduces a new dimension to digital inequality. While AI can improve learning and efficiency, unequal access to such technologies may widen existing gaps. This emerging “AI divide” highlights the importance of inclusive and equitable technological development.

Therefore, addressing the digital divide requires a comprehensive approach that goes beyond infrastructure expansion. It should include digital literacy, affordability, and inclusive policies that ensure equal opportunities for all sections of society. Overall, digital inclusion is essential for promoting social equity and achieving sustainable development in a rapidly evolving digital environment.

13. Conclusion

The digital divide remains a major challenge in the modern digital era. Although digital technologies and social media have expanded access to information

and learning, their benefits are not equally shared. Inequalities in access, digital skills, and usage continue to create gaps in education, economic opportunities, and social participation. In countries like India, these disparities are more visible across rural–urban areas and socio-economic groups. The rise of advanced technologies such as artificial intelligence further risks widening this gap if access remains unequal. Bridging the digital divide requires more than just improving infrastructure. It also demands stronger digital literacy, affordable access, and inclusive policies that support disadvantaged groups. Overall, ensuring equitable access to digital technologies is essential for achieving inclusive development and building a more just and connected society.

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Chapter 26 : Artificial Intelligence and Ethics: A Review of Challenges, Risks, and Responsible Practices

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Abstract

Artificial Intelligence (AI) has become a crucial component of modern society, influencing sectors such as healthcare, education, governance, communication, finance, and economic development. AI technologies can improve efficiency, automation, accuracy, and decision-making; however, they also create significant ethical, social, and governance-related concerns. This review examines the major ethical challenges associated with AI. These include bias and discrimination, privacy and data protection, opacity of algorithms, accountability, cybersecurity risks, and socio-economic inequality. This study specifically focuses on how the use of AI in India may intensify existing social and digital inequalities owing to unequal access to technological resources, digital literacy, and infrastructure. The chapter is guided by the Fairness, Accountability, Transparency, and Ethics (FATE) framework along with the Socio-Technical Systems perspective, which together help analyse AI as both a technological and social phenomenon shaped by governance, institutions, culture, and human interactions. The study also discusses the applications and impacts of AI across different sectors such as healthcare, education, governance, agriculture, finance, and communication. Also, it highlights concerns related to automation, employment transformation, surveillance, and public trust. This chapter further emphasizes the importance of responsible AI governance through transparency, explainable AI systems, accountability mechanisms, privacy protection, and inclusive digital policies. International ethical frameworks and governance initiatives proposed by organizations such as UNESCO, OECD, IEEE, and the European Commission are also discussed. The study concludes that ethical awareness, responsible innovation, inclusive governance, and human-centered AI practices are essential to ensure that AI technologies contribute positively to sustainable development and social welfare while minimizing risks, inequalities, and ethical harm.

Keywords: Artificial Intelligence, Ethics, Data Privacy, AI Governance, Socio-technical Systems, FATE Framework

Introduction:

Artificial Intelligence (AI) refers to machine or software applications with the capability to conduct tasks that require human-like intelligence such as learning, making inferences, and solving problems (Patil et al., 2023).AI is changing the core of industries like health, education, governance, and communication. Given its ability to process large volumes of data, the capacity of AI enhances the effectiveness, accuracy, and creativity of different systems (Harkut et al., 2019).AI originated in the mid-20th century with the first efforts aimed at building machines with human-like thinking. Patil et al. (2023) indicate that the field has mushroomed with the inclusion of areas like machine learning, neural networks, expert systems, natural language processing, and robotics.

AI is increasingly viewed as a crucial competitive factor in technology, economics, and global power dynamics. In response to the need to regulate its application and ensure that its use remains within ethical limits, countries and international organizations are quickly developing frameworks and policies to manage its implementation (Bhatt, 2026). India has the largest initiatives for AI governance globally, with offerings of digital public goods, abundant data resources, and swiftly developed digital models (NITI Aayog, 2018).
While AI has made remarkable progress, it also brings up ethical issues concerning bias, transparency, privacy, accountability, and security. Often referred to as "black boxes," AI systems have decision-making processes that are challenging to interpret or explain, which diminishes transparency and human oversight (Smith & Smith, 2024; Radanliev, 2025). Additionally, unequal access to AI technologies could exacerbate existing socio-economic disparities, especially in developing regions where there are significant gaps in digital infrastructure, technological access, and digital literacy.

While numerous studies have addressed AI ethics, governance, and technological risks, many current reviews are predominantly focused on technology and lack sufficient context for developing nations like India. There has been limited exploration of how AI ethics intersects with socio-economic disparities, the digital divide, governance challenges, and institutional accessibility within the Indian setting. Additionally, the application of the Fairness, Accountability, Transparency, and Ethics (FATE) framework in conjunction with a socio-technical systems perspective has not been thoroughly investigated to comprehend the wider societal impacts of AI.

This chapter, therefore, focuses into the ethical dilemmas, governance issues, and responsible practices related to Artificial Intelligence by employing the FATE framework and Socio-Technical Systems Theory perspectives. The study specifically

focuses This study focuses on how the ethical implications of AI in India are shaped by issues like digital inequality, uneven access to technology, accountability, transparency, and inclusive governance. Thus, by offering a more context-sensitive and governance-focused perspective of AI in developing nations, the chapter adds to the body of work on AI ethics.

Theoretical Framework

This study is guided by the Fairness, Accountability, Transparency, and Ethics (FATE) framework and draws insights from the Socio-Technical Systems Theory. The FATE framework emphasizes that AI systems should operate in a fair, transparent, accountable, and ethically responsible manner. These principles are critical for addressing ethical issues such as algorithmic bias, discrimination, privacy violations, and the absence of accountability in AI systems.

Fairness in AI involves minimizing bias and ensuring that algorithmic decisions lead to fair outcomes. Accountability involves identifying who is responsible for the choices and outcomes generated by AI systems. Transparency focuses on enabling AI processes to be accessible and comprehensible, allowing users to understand how decisions are made. Therefore, creating ethical AI requires balancing technological advancements with the principles of human rights, privacy, trust, and societal well-being (Rama & Prinsloo, 2025).

This study adopts a socio-technical systems perspective, emphasizing that AI systems are closely linked with social, cultural, institutional, and governance structures (Reimers et al; 2025). AI should be viewed not just as a technological solution but as a fundamental part of a wider social ecosystem shaped by institutions, policies, accessibility, and human interactions. A socio-technical approach emphasizes that the ethical implications of AI cannot be resolved through technology alone; rather, they require consideration of governance, culture, and societal values (Tarisayi, 2024).

This viewpoint is particularly relevant in developing nations like India, where digital inequality, cultural diversity, institutional capacity, and governance challenges significantly influence the implementation and ethical implications of AI. Cultural beliefs, social expectations, and institutional practices can impact both the development and use of AI systems. Governance plays a crucial role in ensuring ethical regulation, accountability, and the socially responsible deployment of AI. (Van de Poel & Kudina, 2022).

Moreover, a socio-technical perspective acknowledges that technologies are not morally neutral but actively shape human decisions, values, and social practices. Thus,

responsible AI requires context-sensitive and human-centered approaches that consider both technical efficiency and broader societal consequences. (Verbeek, 2011).
By linking technical issues like bias, accountability, and transparency with broader social realities like digital inequality, institutional accessibility, governance capacity, and public trust, the FATE framework's integration with the socio-technical systems perspective offers a more comprehensive understanding of AI ethics. In the Indian context, where major socioeconomic and digital inequities coexist with technology growth, this integrated approach is especially pertinent.

This study investigates AI as a technological advancement as well as a socio-cultural and governance-related phenomenon by combining the FATE framework with Socio-Technical Systems Theory. As a result, the framework encourages a more context-sensitive examination of AI ethics, especially with regard to inequality, governance, and the appropriate application of AI in India.

Objectives of the Study:

The following are the study's objectives:

1.To investigate the main ethical issues surrounding artificial intelligence, such as accountability, algorithmic opacity, privacy and data protection, bias and discrimination, and transparency.

2. To examine artificial intelligence's effects on society and the economy, with a focus on how AI adds to socioeconomic and digital inequality in India.

3. To investigate how governance, decision-making, and public trust are impacted by the "black-box" nature of AI systems and the absence of human oversight.

4. To assess responsible AI practices and governance frameworks using Socio-Technical Systems Theory and the FATE framework.

Methodology:

This chapter used a descriptive narrative review approach to explore the ethical dilemmas, potential risks, and responsible practices linked to Artificial Intelligence (AI). The research is based solely on secondary data sources and seeks to build a conceptual understanding of AI's growing impact on society, governance, and human life. Given the chapter's emphasis on examining existing knowledge, policies, and ethical issues concerning AI, the descriptive narrative review method was deemed suitable for this study.

A wide range of academic and scholarly sources, including peer-reviewed journal articles, books, edited volumes, conference proceedings, research reports, policy documents, and official publications from international organizations like UNESCO, IEEE, OECD, the European Commission, and NITI Aayog, provided the data for this chapter. Using keywords like "Artificial Intelligence," "AI ethics," "AI governance," "algorithmic bias," "AI risks," "privacy and AI," "transparency," "accountability," and "social impacts of AI," relevant literature was found via platforms such as Google Scholar, Web of Science ResearchGate, DOAJ, institutional repositories, and other open-access academic sources and other scholarly databases and online resources. In order to preserve contextual and social relevance, literature about India was taken into consideration.

In addition to a few basic earlier works relevant to AI ethics and socio-technical systems, the survey mainly examined literature produced between 2006 and 2025.

This study adopts an interpretative and thematic approach to analyse the study. Information from various sources was reviewed, categorized, and organized into major themes such as ethical challenges, technical risks, social and economic impacts, governance issues, and responsible AI practices. This chapter further investigates ethical frameworks and policy approaches proposed by researchers and international organizations for the responsible development and application of AI technologies.

An interpretative and thematic approach is used in this study's analysis. Information from a variety of sources was examined, classified, and arranged into broad themes, including governance concerns, ethical dilemmas, technical dangers, societal and economic effects, and responsible AI practices. The ethical frameworks and policy approaches put forth by scholars and international organizations for the responsible development and use of AI technologies are further examined in this chapter.

The Fairness, Accountability, Transparency, and Ethics (FATE) framework and a Socio-Technical Systems viewpoint serve as the theoretical foundation for this investigation. These frameworks make it easier to analyze AI as a social phenomenon linked to institutions, governance, culture, and human values rather than only as a technology system. The chapter seeks to offer a methodical, critical, and thorough understanding of AI ethics and its wider societal implications using this review-based technique. Despite offering a comprehensive conceptual knowledge of AI ethics, this narrative study is limited by its non-systematic approach and dependence on secondary sources written in English. As a result, it's possible that certain regional viewpoints and new research were underrepresented.

Discussion on AI Challenges, Risks, Ethics, and Impacts:

Ethical Challenges of Artificial Intelligence:

Artificial Intelligence (AI) has become an important part of modern society and is increasingly used in healthcare, education, governance, transportation, finance, communication, and many other sectors. Although AI improves efficiency, automation, and decision-making, it also raises several ethical concerns that affect individuals and society.

One of the major ethical challenges is the lack of transparency in AI systems. Many AI technologies operate through highly complex algorithms, making it difficult for users to understand how decisions are made. This issue is commonly known as the "black-box problem" (Harkut et al., 2019). A lack of transparency reduces public trust and creates difficulties in identifying errors, ensuring fairness, and maintaining accountability. Therefore, researchers and policymakers emphasize the importance of explainable and transparent AI systems for ethical and responsible AI implementation (European Commission, 2019; IEEE; 2019).

Bias and discrimination in AI systems is another critical ethical issue. AI systems learn from existing datasets, and when those datasets contain historical or social biases, the system may reproduce unfair and discriminatory outcomes (Siau & Wang; 2020). Bias may occur based on gender, race, ethnicity, age, language, or socio-economic background. Such discrimination can negatively affect sectors such as education, healthcare, recruitment, finance, and law enforcement (Syukrina & Nugraha; 2025). For instance, AI-based recruitment systems may unfairly reject candidates belonging to disadvantaged groups because they rely on biased historical information.

Privacy and data protection are also serious ethical concerns associated with AI technologies. AI systems require large amounts of personal and sensitive data to function effectively. Improper data collection, weak cybersecurity systems, and unauthorized access to information may lead to privacy violations and misuse of personal data (Siau & Wang; 2020). Technologies such as facial recognition systems, biometric identification, virtual assistants, and healthcare AI increase the risk of surveillance and data misuse. Therefore, ethical AI requires strong privacy protections, secure data management systems, and responsible use of personal information.

Another important challenge is accountability in AI systems. When AI technologies make harmful or incorrect decisions, it often becomes difficult to determine who should be held responsible. Responsibility may involve developers, organizations, governments, or users (Syukrina & Nugraha; 2025). Since many AI systems function autonomously, questions regarding legal and ethical liability become more complex.

Lack of accountability mechanisms may reduce public trust and create difficulties in ensuring justice for affected individuals.

Technical Risks and Limitations of AI:

Despite its rapid advancements, artificial intelligence continues to encounter several technical and operational limitations. AI systems depend heavily on data quality and availability. Poor-quality or insufficient data can reduce the accuracy, reliability, and effectiveness of AI technology (Douglas et al., 2024). Inaccurate datasets may lead to misleading output and faulty decision-making processes.

AI systems are also vulnerable to software errors, technical malfunctions, and cybersecurity threats. Weak cybersecurity protections may increase the risk of hacking, cyberattacks, identity theft, and data breaches (Timmermans et al., 2010). In critical sectors such as healthcare, finance, and transportation, technical failures in AI systems may create serious risks for human safety and security.

Another limitation is that AI lacks human emotions, moral reasoning, creativity, empathy, and emotional understanding. While AI can efficiently perform programmed tasks, it cannot think, feel, or make ethical judgments in the same way humans do. Therefore, excessive dependence on AI may reduce human control and create ethical concerns in decision-making processes.

Social and Economic Impacts of AI:

The growing adoption of AI technologies is driving significant social and economic changes worldwide. Automation and intelligent systems are replacing many routine tasks, potentially causing job losses in various sectors (Harari, 2016). While AI can create new jobs, it also transforms work nature and raises the need for advanced digital skills.

Unequal access to AI and digital resources risks widening social and economic inequalities, especially in developing countries. Those lacking technology, education, and infrastructure may be excluded from AI benefits, deepening divides between urban and rural areas and between developed and developing regions.

Moreover, AI algorithms on social media impact public opinion, communication, and information access. They can spread misinformation, reinforce echo chambers, and fuel social polarization, undermining democratic values and public trust.

Applications and Impacts of AI in Various Sectors:

The influence of artificial intelligence (AI) is evident in numerous sectors.

1. **AI in Healthcare:** In healthcare, AI enhances disease prediction, medical diagnosis, robotic surgery, and treatment planning. However, biased algorithms may lead to unequal treatment outcomes for marginalized and disadvantaged groups.
2. **AI in Education:** In education, AI facilitates personalized learning, automated assessments, smart classrooms, and adaptive learning platforms. However, disparities in access to digital technology may hinder students from rural or economically disadvantaged backgrounds.
3. **AI in Governance and Law Enforcement:** In governance and law enforcement, AI technologies are increasingly utilized for surveillance, predictive policing, facial recognition, and public administration. While these technologies can enhance efficiency and security, they also raise concerns regarding privacy violations, discrimination, and civil liberties threats.
4. **AI in Transportation:** In transportation, autonomous vehicles and AI-based traffic management systems have the potential to enhance road safety and efficiency. However, technical failures and ethical dilemmas in autonomous systems could jeopardize human lives.
5. **AI in Agriculture:** AI is also reshaping sectors such as agriculture, finance, communication, and cybersecurity. In agriculture, AI aids in crop prediction, smart irrigation, and resource management.
6. **AI in Finance:** Within finance, AI supports fraud detection, digital banking, and automated financial services. Although these applications offer substantial benefits, they also pose ethical and regulatory challenges that necessitate responsible governance.

AI and Socio-Economic Inequality in the Indian Context:

In India, AI is increasingly recognized as a facilitator for economic growth, digital governance, and technological innovation. Initiatives such as Digital India and the National Strategy for Artificial Intelligence by NITI Aayog underscore the growing significance of AI in national development. However, unequal access to digital infrastructure, quality education, internet connectivity, and technological resources may exacerbate social and economic inequalities.

Rural populations, economically disadvantaged groups, and marginalized communities may not receive equal benefits from AI technologies due to limited digital literacy and inadequate access to technology. Furthermore, the concentration of technological power among large corporations may further widen disparities in employment, education, and access to opportunities.

AI-driven surveillance systems and extensive data collection also raise concerns regarding privacy, governance, and civil liberties in India. Consequently, ethical AI governance in India necessitates inclusive policies, enhanced digital accessibility, accountability mechanisms, and the safeguarding of fundamental rights.

Responsible AI Practices and Governance:

Several ethical frameworks and governance guidelines have been proposed by researchers and international organizations to reduce the risks and ethical challenges associated with AI. AI ethics refers to the moral principles and values that guide the design, development, and use of AI systems (Anderson & Anderson; 2007, Moor; 2006).

AI has significant potential to improve human life. Organizations such as UNESCO, IEEE, OECD, and the European Commission have introduced ethical guidelines to encourage human-centered and socially responsible AI development (European Commission; 2019, IEEE; 2019, UNESCO; 2017).

Governments and policymakers also play a major role in AI governance. Strong legal frameworks, transparency standards, accountability mechanisms, data protection laws, and public participation are essential for minimizing AI-related risks. Human oversight and ethical evaluation should remain central to AI decision-making processes to ensure that technology responsibly serves society.

Future Directions of Ethical and Responsible AI:

The advancement of Artificial Intelligence (AI) depends on balancing technological progress with ethical accountability, inclusive governance, and the well-being of humanity. As AI technologies are increasingly used in sectors such as healthcare, education, governance, communication, and economic growth, it is crucial for future AI systems to emphasize safety, sustainability, and social responsibility. This focus is essential to reduce negative impacts and secure long-term benefits for society (Ordu et al., 2025; Alfiras et al., 2025).

A key future direction involves establishing stronger governance and regulatory frameworks for AI technologies. Governments, policymakers, and international organizations increasingly acknowledge the need for ethical guidelines and legal safeguards to ensure the responsible deployment of AI. International frameworks such as the UNESCO AI Ethics Guidelines, OECD AI Principles, and the European Union AI Act are expected to shape future AI governance practices across different sectors

(European Commission; 2025, UNESCO; 2021). Regulatory systems should remain flexible and adaptive to address the rapidly evolving nature of AI technologies.

As discussed earlier under socio-economic inequality, unequal access to digital infrastructure and AI literacy may restrict equitable participation in AI-driven development, especially in emerging societies.
In the Indian context, future AI policies should focus on digital literacy, affordable technological access, multilingual AI systems, and ethical educational technologies. Government initiatives such as Digital India, NITI Aayog's National Strategy for Artificial Intelligence, and the National Education Policy (NEP 2020) could contribute to more inclusive AI integration in education and governance.

In education, future developments should encourage responsible AI usage, critical thinking, creativity, and ethical awareness among students and teachers. Educational institutions should prepare learners to critically evaluate AI-generated information and digital content while promoting responsible technology use (Cotton et al., 2023). Research is also needed to understand the long-term impact of AI on learning behavior, academic integrity, creativity, and student well-being (Currie; 2024).

Future AI technologies are also expected to become more advanced and accessible across sectors such as healthcare, agriculture, finance, governance, and scientific research. Also, future developments should address sustainability concerns related to energy consumption and environmental impact. Sustainable AI practices and efficient technological infrastructure will therefore become increasingly important areas of future research and policy development.

Another important future prospect is collaborative and participatory AI governance. Governments, researchers, educators, technology companies, legal experts, and civil society organizations should work together to develop ethical standards, operational guidelines, and governance frameworks for responsible AI implementation (World Economic Forum; 2024). Public participation and interdisciplinary collaboration can strengthen trust, accountability, and socially responsible innovation.

AI is expected to continue transforming society through innovations and technological advancement. However, sustainable and socially beneficial progress requires continuous oversight, ethical awareness, inclusive governance, and responsible implementation strategies. AI can contribute positively to human development, social welfare, and sustainable progress in the future through effective collaboration and human-centered policies (Ordu et al., 2025; Alfiras et al., 2025).

Recommendations for ethical and responsible use of AI:

Ensuring the ethical and responsible application of Artificial Intelligence (AI) requires a commitment to fairness, inclusivity, accountability, and the protection of human rights. Governments, policymakers, educators, organizations, and technology developers should collaborate to ensure that AI technologies are deployed in ways that benefit society while reducing potential risks and harm (UNESCO; 2021; European Commission; 2019).

A key recommendation is to create transparent and explainable AI systems that enable users to gain a clearer understanding of how these systems process information and make decisions (Harkut et al., 2019). Therefore, promoting clear documentation and transparency in AI development is essential.

A further critical recommendation is to reduce algorithmic bias and discrimination. It is crucial that AI systems employ diverse and representative datasets to ensure the equitable treatment of individuals from varied social, linguistic, cultural, and economic backgrounds. Also, regular auditing and monitoring of AI systems are essential to minimize discriminatory outcomes in sectors such as healthcare, education, recruitment, governance, and law enforcement (Siau & Wang, 2020).

To prevent unauthorized access, surveillance, identity theft, and the misuse of personal information privacy protection and cybersecurity measures are vital for the responsible implementation of AI. Governments and organizations should create secure data management systems and ethical data usage policies. Human oversight should remain central in AI decision-making processes, particularly in critical sectors such as healthcare, education, governance, and law enforcement. AI systems should support human decision-making rather than completely replacing human judgment and ethical evaluation.

Another recommendation is the promotion of AI literacy and ethical awareness among students, teachers, policymakers, and the general public. Educational institutions should encourage responsible AI usage, critical evaluation of AI-generated content, and awareness regarding misinformation, digital privacy, and ethical technology use.

Governments and policymakers should also strengthen AI governance through ethical guidelines, legal frameworks, and accountability mechanisms. International organizations such as UNESCO, OECD, IEEE, and the European Commission have emphasized the importance of responsible and human-centered AI governance (IEEE, 2019; OECD, 2023).

Reducing digital gaps and increasing technology accessibility are still crucial for equitable AI implementation in the Indian context, as was previously highlighted under socioeconomic inequality. Also, for creating responsible AI governance, there should be collaborative participation among governments, researchers, educators, technology companies, and civil society organizations

Artificial Intelligence (AI) has become one of the most transformative technologies of the modern era. Its impact can be seen in in various sectors such as healthcare, education, governance, communication, finance, and transportation. AI offers significant benefits in terms of efficiency, automation, innovation, and decision-making. It also creates serious ethical, social, economic, and governance-related challenges. Issues such as algorithmic bias, lack of transparency, privacy violations, accountability concerns, cybersecurity threats, and socio-economic inequality highlight the need for responsible and human-centered AI development.

This study examined the ethical challenges, risks, and responsible practices associated with AI through the perspectives of the FATE framework and Socio-Technical Systems Theory. The study emphasized that AI systems are not merely technical tools but socio-technical system. It is shaped by cultural values, governance structures, institutional practices, and human interactions. The discussion also highlighted that unequal access to technology, digital infrastructure, and AI literacy may further increase social inequalities, particularly in developing countries such as India.
The integration of the FATE framework with the socio-technical systems perspective helped explain how ethical concerns such as fairness, accountability, transparency, and inclusiveness are closely connected with India's social realities, including digital inequality, unequal technological access, and governance limitations. The study therefore highlights that AI ethics cannot be understood only through technological perspectives but must also consider broader institutional, cultural, and socio-economic contexts.

The chapter further explored the importance of transparency, accountability, fairness, inclusiveness, and ethical governance in AI implementation. Responsible AI requires strong regulatory frameworks, human oversight, data protection mechanisms, public awareness, and collaborative participation. Transparency, accountability, inclusive digital regulations, human monitoring, and fair access to technology are therefore necessary for responsible AI governance. By offering a more context-sensitive and governance-focused perspective of AI ethics in the Indian setting, the chapter contributes to AI ethics literature. To guarantee that AI makes a positive contribution to inclusive and sustainable development, technical progress must be balanced with human values, social fairness, and responsible governance.

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Chapter 27 : Poverty in India: Structural Transformation, Multidimensional Challenges, and Policy Pathways

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Abstract

Poverty in India has undergone a profound transformation over the past three decades, shifting from widespread extreme deprivation to a more complex and multidimensional condition shaped by structural inequality, uneven regional development, and emerging environmental and labor-market vulnerabilities. This chapter offers a critically integrated examination of India's poverty trajectory through economic, social, spatial, and policy lenses. Drawing on secondary datasets, national multidimensional poverty estimates, international development reports, and interdisciplinary scholarship, the analysis demonstrates that poverty reduction has been driven by sustained economic growth, welfare expansion, rural employment guarantees, food security systems, housing support, direct benefit transfers, and financial inclusion initiatives. Simultaneously, the chapter highlights persistent disparities across caste, tribe, gender, rural–urban locations, and lagging states, which continue to shape unequal access to livelihoods, public services, and human development outcomes. The discussion further identifies emerging pressures including climate vulnerability, rapid urbanization, labor informality, technological disruption, and rising inequality—that threaten to slow or reverse recent gains. By adopting a multidimensional framework rooted in capability and vulnerability perspectives, the chapter moves beyond income-based measures to assess poverty through health, education, living standards, resilience, and livelihood security. It concludes by proposing policy pathways centered on inclusive growth, regionally differentiated development, climate-resilient livelihoods, and adaptive social protection systems to ensure durable and equitable poverty reduction in India.

Keywords: Poverty; India; Multidimensional Poverty; Inequality; Social Policy; Development

1. Introduction

Poverty continues to represent one of the most enduring and multidimensional challenges within India's development trajectory. Although the country has recorded substantial progress in reducing extreme deprivation over the past three decades, poverty has not simply declined in numerical terms; rather, its nature has become increasingly complex. Contemporary poverty in India is shaped by structural inequalities, uneven regional development, ecological vulnerability, and the pressures of rapid urban transformation. This changing landscape necessitates moving beyond narrow income-based interpretations toward a broader analytical lens that captures inequalities in health, education, living standards, livelihood security, and resilience capacities (NITI Aayog, 2023; United Nations Development Programme [UNDP], 2023).

The economic reforms initiated after 1991 marked a major turning point in India's poverty trajectory. Higher growth rates, sectoral diversification, infrastructure expansion, and improved public service delivery contributed significantly to reductions in income and multidimensional poverty. At the same time, state-led welfare interventions, including rural employment guarantees, food security programmes, livelihood missions, housing assistance, direct benefit transfers, and financial inclusion initiatives, strengthened household coping capacity and widened access to essential services (Drèze & Sen, 2013; NITI Aayog, 2023).

Despite these gains, poverty reduction remains deeply uneven across India's social and spatial landscape. Persistent disparities continue across caste, tribe, gender, rural–urban locations, and historically disadvantaged states. Rural poverty remains closely associated with agricultural dependence, low productivity, and climate-sensitive livelihood risks, whereas urban poverty is increasingly linked to labor informality, insecure housing, and unequal access to public services. These patterns indicate that poverty is embedded within institutional access, social hierarchies, and geographical inequalities rather than being merely a deficit of income (Kabeer, 2015; NITI Aayog, 2023).

The challenge is further intensified by new structural pressures. Climate vulnerability, especially in flood-prone and ecologically fragile regions, continues to disrupt livelihoods and reinforce chronic deprivation. Simultaneously, rapid urbanization, technological labor-market transitions, informality, and widening inequality are producing new forms of vulnerability that may slow or even reverse recent gains in poverty reduction (Hallegatte et al., 2016; UN-Habitat, 2020).

Against this backdrop, this chapter adopts a multidimensional perspective to critically examine poverty in India through economic, social, regional, and policy dimensions. It seeks to explain both the drivers of poverty decline and the persistence of unequal outcomes, while identifying policy pathways centered on inclusive growth, stronger social protection, climate-resilient livelihoods, and regionally differentiated development strategies.

2. Conceptual Framework and Literature Review

The conceptual understanding of poverty has shifted from narrow income- and consumption-based measures to multidimensional frameworks capturing structural, social, and relational deprivation. Earlier approaches in India relied on expenditure thresholds based on calorie norms, which were useful for macro estimates but overlooked deficits in health, education, housing, and basic services (Government of India, 2009; Deaton & Kozel, 2005). The capability approach provides a stronger foundation by defining poverty as the deprivation of freedoms and opportunities necessary for a meaningful life (Sen, 1999). This perspective is particularly relevant in India, where deprivation is shaped by caste, tribal exclusion, gender inequality, and spatial marginalization (Kabeer, 2015). Multidimensional frameworks further operationalize poverty across health, education, and living standards, while recent studies incorporate resilience, vulnerability, and environmental exposure (Alkire & Foster, 2011; UNDP, 2023).

A substantial body of literature links poverty reduction in India to structural transformation following the 1991 economic reforms, including sectoral diversification, infrastructure expansion, and rising productivity (World Bank, 2022). However, the impact of growth depends on its inclusiveness and access to public goods (Drèze & Sen, 2013). Evidence shows that improvements in sanitation, electrification, housing, and financial inclusion have significantly contributed to multidimensional poverty reduction beyond income gains (NITI Aayog, 2023).

Poverty remains closely tied to social exclusion and intergenerational inequality. Scheduled Castes, Scheduled Tribes, and women face persistent disadvantages in education, labor markets, and asset ownership, leading to chronic poverty traps (Kabeer, 2015; NITI Aayog, 2023; UN Women, 2020). These inequalities demonstrate that poverty is socially reproduced rather than purely economic.

Spatial disparities further shape poverty outcomes. States such as Bihar, Jharkhand, and Uttar Pradesh show higher deprivation, while Kerala and Tamil Nadu perform better due to stronger human development investments (NITI Aayog, 2023; UNDP, 2023). Rural poverty is linked to agricultural dependence and climate risks, whereas urban poverty is increasingly associated with informality, migration, and service exclusion (Chen & Carré, 2020; UN-Habitat, 2020).

Recent scholarship highlights emerging drivers such as climate change, urbanization, informality, and technological disruption. Climate shocks erode livelihoods and assets, particularly in vulnerable regions (Hallegatte et al., 2016; IPCC, 2022). Urban expansion has increased informal settlements and precarious work, while digital and technological shifts risk excluding low-skilled workers (ILO, 2021; OECD, 2020).

Finally, welfare and governance literature underscores the role of state interventions in poverty reduction. Programmes related to employment, food security, housing, and financial inclusion have improved resilience, though challenges in targeting and implementation persist (Drèze & Sen, 2013; NITI Aayog, 2023; Banerjee & Duflo, 2011).

Overall, the literature highlights that poverty in India is multidimensional, shaped by structural transformation, social exclusion, spatial inequality, environmental vulnerability, and governance systems.

3. Methodology

3.1. Research Design

This chapter employs a qualitative analytical research design grounded in secondary data interpretation and documentary review. The central objective is to examine the structural transformation of poverty in India by integrating long-term statistical trends with policy evaluation and conceptual debates from contemporary development scholarship. The design is explanatory and interpretive, enabling the analysis to connect empirical poverty outcomes with broader socio-economic, institutional, and regional determinants.

3.2. Data Sources

The analysis draws upon diverse categories of secondary materials to ensure both empirical rigor and policy relevance:

- national multidimensional poverty datasets and disaggregated state-level estimates (NITI Aayog, 2023; UNDP, 2023)
- government reports and Programme documents on employment, food security, housing, and financial inclusion (Government of India, 2009; NITI Aayog, 2023)
- international development reports on poverty, inequality, and human development (UNDP, 2023; World Bank, 2022)
- peer-reviewed scholarship on social exclusion, welfare governance, and regional disparities (Kabeer, 2015)

- interdisciplinary studies on urbanization, climate vulnerability, labor informality, and gender inequality (Chen & Carré, 2020; Hallegatte et al., 2016)

Taken together, these sources support a multidimensional and policy-oriented interpretation of poverty transitions in India.

3.3. Analytical Framework

The chapter is structured around a multidimensional poverty framework that examines deprivation through four interconnected domains:

- economic dimension: income poverty, employment, labor informality, and livelihood security
- social dimension: caste, tribe, gender, health, education, and social exclusion
- regional dimension: interstate disparities, rural–urban divides, and spatial inequality
- environmental and emerging vulnerability dimension: climate risks, urban stress, technological change, and rising inequality

This framework enables the study to move beyond aggregate poverty decline and instead interrogate how development gains remain unevenly distributed across groups and regions.

3.4. Method of Analysis

The chapter follows a thematic and trend-oriented analytical strategy.

- Trend analysis is used to interpret temporal shifts in multidimensional poverty indicators, including rural–urban contrasts and interstate variation.
- Thematic policy analysis evaluates the effectiveness of major anti-poverty interventions such as employment programmes, food security systems, housing support, and transfer-based welfare.
- Comparative social analysis examines disproportionate deprivation among Scheduled Castes, Scheduled Tribes, women, and residents of lagging states.
- Vulnerability-oriented contextual analysis assesses how climate stress, rapid urbanization, and labor-market restructuring are reshaping contemporary poverty dynamics.

3.5. Scope and Rationale

The combination of statistical secondary evidence with documentary and thematic policy analysis is especially suitable for a chapter-level study focused on long-term structural change. This approach allows the chapter to synthesize macro-level poverty transitions, identify persistent inequalities, and critically assess the effectiveness of state interventions without being constrained by a single dataset or sectoral lens.

Overall, the methodology directly supports the chapter's central argument that poverty reduction in India should be understood as a multidimensional, uneven, and policy-mediated process shaped simultaneously by structural transformation and emerging vulnerabilities.

4. Poverty Trends and Structural Transformation

The evolution of poverty in India over the last three decades reflects a major process of socio-economic restructuring. Since the initiation of economic reforms in the early 1990s, the country has experienced a sustained decline in deprivation, not only in income terms but also across broader human development indicators. This transformation has been shaped by accelerated economic growth, sectoral diversification, public investment in infrastructure, and the expansion of welfare delivery systems (NITI Aayog, 2023). Rather than representing a uniform decline, however, the poverty transition has unfolded unevenly across social groups and regions. The changing pattern of deprivation is therefore best understood through a layered analysis of macro-level decline, multidimensional improvements, rural–urban contrasts, and interstate disparities.

4.1 National Poverty Decline

At the national scale, the decline in poverty is closely associated with India's post-reform structural transformation. The liberalization era expanded the role of manufacturing, services, trade, and transport, gradually reducing exclusive dependence on subsistence agriculture. As labor shifted toward non-farm sectors, many households gained access to more diversified income streams, which contributed to greater economic resilience.

The reduction in poverty was further strengthened by state-led interventions. Rural employment programmes, subsidized food systems, housing support, and financial inclusion initiatives improved the ability of low-income households to cope with vulnerability and income shocks (NITI Aayog, 2023). Improvements in rural roads, electrification, and digital payment systems also enhanced market participation and service accessibility.

A significant analytical shift in recent years has been the movement away from purely expenditure-based poverty estimates toward multidimensional assessments. According to national estimates, the proportion of the population experiencing multidimensional poverty declined from 24.85 percent in 2015–16 to 14.96 percent in 2019–21, reflecting one of the most substantial reductions in recent decades (NITI Aayog, 2023)(Table 1; Figure 1).

Table 1: India's Multidimensional Poverty Reduction, 2015–16 to 2019–21

Indicator	2015–16	2019–21	Change
Headcount Ratio (%)	24.85	14.96	-9.89
Number of Poor (millions)	370	234	-135
Intensity of Poverty (%)	47.14	44.39	-2.75

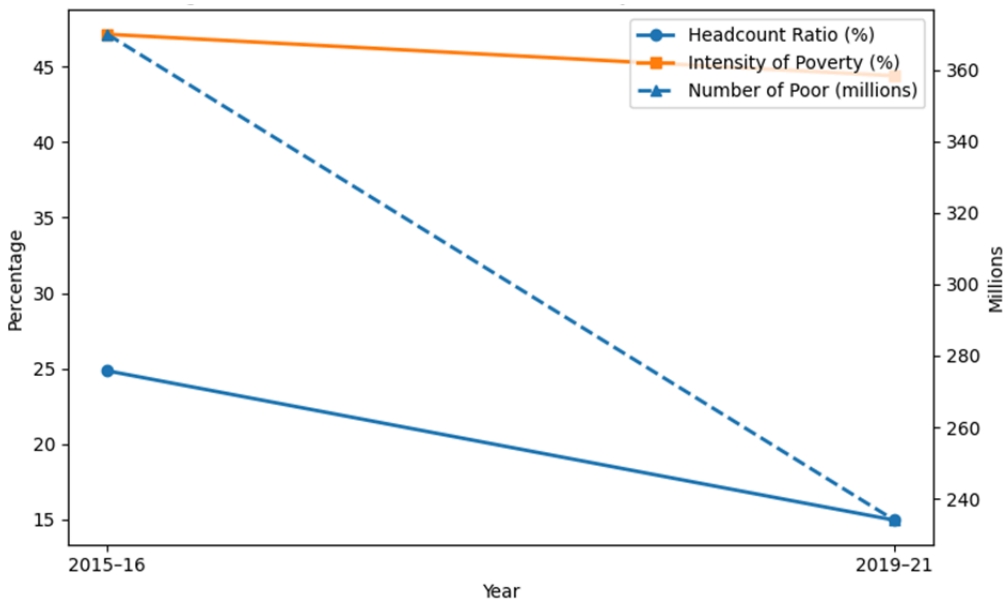


Figure 1. Trend in Multidimensional Poverty Reduction in India (2015–16 to 2019–21)

This trend suggests that India's poverty transition is increasingly linked to broader structural changes in capability enhancement rather than solely increases in household consumption.

4.2 Multidimensional Progress

A multidimensional perspective offers a more nuanced understanding of poverty reduction because it captures simultaneous deprivations in health, education, and living conditions. Traditional monetary thresholds often obscure the lived realities of households that may be above the income poverty line yet still face deficits in schooling, sanitation, or secure housing. A capability-oriented approach therefore provides a stronger interpretive framework for assessing development progress (Sen, 1999).

India's recent gains have been especially visible in the sphere of living standards. Expanded sanitation coverage, rural electrification, housing programmes, access to cleaner cooking fuel, and improved drinking water infrastructure have substantially reduced non-income deprivation. Parallel progress in educational access, especially school attendance and years of schooling, indicates long-term investments in human capital formation (Table 2).

Table 2. Multidimensional Poverty Index (MPI) Indicators in India

Dimension	Indicator	Deprivation Criteria
Health	Nutrition	Any adult or child is undernourished
Health	Child Mortality	Any child death in the household
Education	Years of Schooling	No household member has completed 6 years of schooling
Education	School Attendance	School-aged child not attending school
Living Standards	Cooking Fuel	Use of solid fuels
Living Standards	Sanitation	No improved sanitation or shared facility
Living Standards	Drinking Water	Unsafe or distant water source
Living Standards	Electricity	No electricity access
Living Standards	Housing	Kuccha / temporary materials
Living Standards	Assets	Lack of basic household assets

These improvements reflect the growing importance of welfare architecture in shaping development outcomes. The decline in deprivation is no longer explained only by market-led growth; rather, it increasingly derives from the expansion of public goods and institutional delivery systems (NITI Aayog, 2023).

Nevertheless, progress remains socially differentiated. Historically marginalized populations—including Scheduled Castes, Scheduled Tribes, landless households, and women-headed families—continue to face overlapping disadvantages. This persistence indicates that multidimensional progress coexists with structurally embedded inequalities.

4.3 Rural–Urban Distribution

The rural–urban divide remains one of the most important dimensions of India's poverty structure. Although both spaces have recorded improvement, deprivation remains considerably higher in rural India than in urban areas.

Recent evidence shows that rural multidimensional poverty remains nearly four times the urban level, underscoring the continued vulnerability of agrarian livelihoods (NITI Aayog, 2023) (Table 3; Figure 2).

Table 3. Rural–Urban Poverty Distribution (2019–21)

Region	MPI Headcount Ratio (%)
Rural	19.28
Urban	5.27

Rural poverty continues to be shaped by dependence on agriculture, fragmented landholdings, low productivity, inadequate irrigation, and seasonal employment patterns. These vulnerabilities are intensified by climate-sensitive livelihoods, especially in drought-prone and flood-affected regions.

Urban poverty, by contrast, increasingly reflects a different deprivation profile. The growth of informal employment, insecure wage systems, migrant exclusion, and precarious settlements has produced new forms of vulnerability linked to urban expansion. Thus, urbanization has not eliminated poverty; rather, it has transformed its spatial expression.

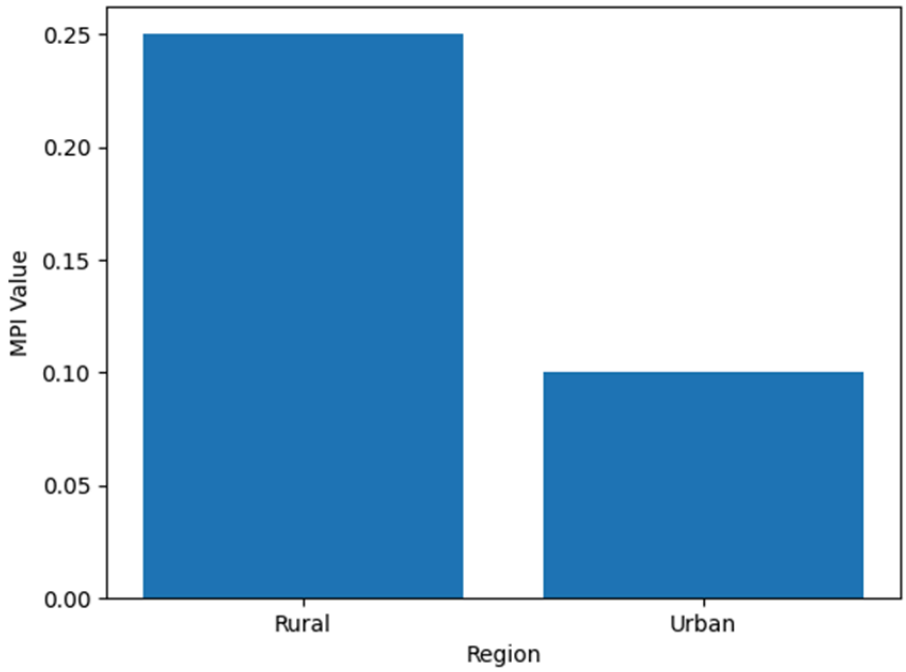


Figure 2: Rural Urban poverty gap in India (MPI)

This contrast points to the emergence of a poverty continuum, in which deprivation moves with labor migration and changing settlement patterns. In many cases, rural hardship is transferred into urban informality rather than permanently resolved.

4.4 State-Level Variations

A spatial reading of poverty trends across Indian states further reveals the differentiated nature of structural transformation. The pace of poverty reduction varies significantly depending on governance effectiveness, institutional capacity, infrastructure expansion, and historical social investment.

States such as Bihar, Jharkhand, Uttar Pradesh, Madhya Pradesh, and Assam continue to report relatively elevated multidimensional poverty levels, while Kerala and Tamil Nadu consistently perform better on human development indicators (NITI Aayog, 2023) (Table 4; Figure 3).

Table 4. State-wise Multidimensional Poverty (Selected States)

State	MPI Headcount Ratio (%)	Poverty Level
Bihar	33.76	Very High

Jharkhand	28.81	High
Uttar Pradesh	22.93	High
Madhya Pradesh	20.63	High
Assam	19.35	Moderate–High
Rajasthan	15.31	Moderate
West Bengal	11.89	Moderate
Tamil Nadu	4.89	Low
Kerala	0.71	Very Low

These differences are not merely economic; they also reflect disparities in schooling outcomes, health infrastructure, decentralization capacity, and effectiveness of welfare delivery systems. Kerala's relatively low poverty incidence, for example, is strongly associated with long-term investments in literacy, healthcare, and decentralized governance.

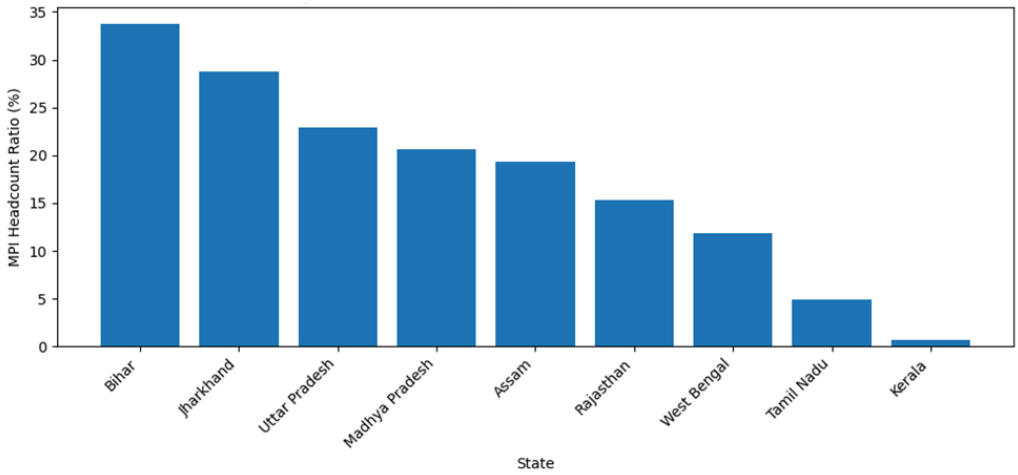


Figure 3: State wise comparison of MPI Headcount Ratios

The persistence of deprivation in lagging states demonstrates that poverty reduction in India is territorially uneven. Economic growth alone cannot account for these differences. Instead, institutional quality and the capacity to translate development spending into social outcomes play decisive roles.

This suggests that future anti-poverty strategies must move beyond nationally uniform interventions toward regionally differentiated planning models, particularly in states facing agrarian stress, ecological vulnerability, and social exclusion.

5. Structural Determinants of Poverty

Poverty in India persists not merely as an outcome of inadequate income, but as the product of deeper structural forces embedded within the economy, society, geography, and ecology. Although sustained economic growth and welfare expansion have reduced aggregate deprivation, the persistence of poverty among particular social groups and regions indicates that its roots remain systemic. Structural determinants influence the extent to which households can access livelihoods, education, public services, and resilience resources. In the Indian context, poverty is reproduced through unequal labor markets, historically embedded social exclusion, territorial disparities, and rising ecological stress (NITI Aayog, 2023). This section examines these drivers through four interrelated dimensions: growth and informality, social exclusion, regional inequality, and environmental vulnerability.

5.1 Growth, Employment, and Informality

Economic growth has played a central role in India's poverty reduction trajectory. Since the post-1991 reform period, higher GDP growth, sectoral diversification, infrastructure expansion, and improved market integration have created new livelihood opportunities. However, the poverty-reducing effects of growth are critically dependent on the quality, security, and inclusiveness of employment generation.

A major structural concern is the persistence of a large workforce in informal, low-productivity, and insecure sectors. A significant proportion of workers remain concentrated in casual labor, self-employment, domestic work, petty trade, and construction activities, where earnings are unstable and social protection coverage remains limited. Such forms of work may temporarily raise households above extreme poverty thresholds, yet they rarely support durable upward mobility or asset accumulation.

This creates a pattern of employment without economic security, where participation in labor markets does not necessarily translate into sustained poverty exit. Weak employment elasticity—often described as "jobless" or low employment-intensive growth—reduces the inclusiveness of macroeconomic expansion and constrains broad-based welfare gains. In this sense, the relationship between growth and poverty reduction depends less on aggregate output expansion and more on the extent to which structural transformation generates formal, protected, and productivity-enhancing employment opportunities (Sen, 1999).

5.2 Social Exclusion and Intergenerational Poverty

Poverty in India remains deeply embedded within historically produced systems of social hierarchy and exclusion. Caste, tribe, gender, ethnicity, and class continue to shape unequal access to land, education, labor markets, financial systems, and state institutions. As a result, deprivation is systematically concentrated among historically marginalized communities rather than being randomly distributed.

Scheduled Castes and Scheduled Tribes continue to experience disproportionately high multidimensional poverty due to persistent inequalities in land ownership, educational attainment, occupational mobility, and institutional representation (NITI Aayog, 2023). In many rural areas, these disadvantages are transmitted across generations, producing intergenerational poverty traps in which children inherit not only low income but also constrained capabilities and restricted opportunity structures.

Gender further intensifies this structural pattern. Women disproportionately shoulder unpaid care responsibilities, face lower labor-force participation, receive lower wages, and possess weaker claims over land, housing, and productive assets. Female-headed households, widows, and women in informal employment frequently experience heightened livelihood insecurity.

These patterns indicate that poverty is not only a matter of material scarcity but also a consequence of asymmetric social power relations. Without addressing exclusionary structures, aggregate poverty reduction may coexist with persistent deprivation among historically disadvantaged populations.

5.3 Regional and Spatial Inequality

India's poverty geography reflects pronounced interstate and intra-regional disparities. Despite national-level improvements, the pace and depth of poverty reduction vary considerably across states, districts, and rural–urban zones, underscoring the territorial nature of structural deprivation.

States such as Bihar, Jharkhand, Uttar Pradesh, Madhya Pradesh, and Assam continue to report relatively high multidimensional poverty, while Kerala and Tamil Nadu demonstrate stronger welfare outcomes and lower deprivation levels (NITI Aayog, 2023). These variations are closely linked to differences in governance quality, public investment, institutional capacity, infrastructure expansion, and social sector performance.

Regions with weak health systems, poor educational access, limited industrial diversification, and inadequate connectivity tend to exhibit persistent poverty. By contrast, states that invested early in literacy, healthcare, decentralization, and public welfare have been more successful in translating growth into capability enhancement.

Spatial inequality also operates within states. Tribal belts, char areas, hill districts, floodplains, and ecologically fragile zones often remain peripheral to mainstream development processes. Consequently, poverty in India is not merely household-based but also place-based, shaped by local institutional ecosystems and uneven territorial development.

5.4 Environmental Vulnerability

Environmental stress is increasingly emerging as a critical structural determinant of poverty in India. Climate variability, recurrent floods, droughts, heat stress, soil erosion, and water insecurity now directly shape livelihood stability, particularly in agriculture-dependent and ecologically fragile regions.

Flood-prone states such as Assam, especially the Brahmaputra basin, offer a clear illustration of how ecological vulnerability reinforces chronic poverty. Repeated flooding disrupts agriculture, destroys homes, damages infrastructure, erodes cultivable land, and displaces communities. These recurring shocks weaken household asset bases, increase indebtedness, and reduce long-term recovery capacity, often locking families into persistent poverty traps. The climate–poverty nexus is particularly severe where pre-existing inequality and weak institutional support limit adaptive capacity.

For marginal farmers, fishing communities, riverine populations, and landless laborers, climate shocks act as poverty multipliers by intensifying already existing socio-economic disadvantages. The poor are disproportionately exposed because they often reside in hazard-prone areas, lack savings and insurance, and depend on climate-sensitive livelihoods.

Environmental vulnerability therefore transforms poverty from a static condition into a dynamic cycle of repeated asset erosion, livelihood instability, and reduced resilience. As climate change intensifies, poverty analysis in India must increasingly integrate ecological risk, disaster exposure, and adaptive capacity into its structural framework (IPCC, 2022).

6. Rural–Urban Poverty Dynamics

Rural and urban poverty in India represent distinct yet deeply interconnected expressions of deprivation. Although the sources and manifestations of poverty differ across these spaces, they are increasingly linked through migration, labor mobility, market integration, and social protection gaps. A nuanced understanding of India's poverty structure therefore requires moving beyond a binary rural–urban distinction toward a continuum-based perspective in which deprivation shifts spatially rather than disappearing altogether.

Rural poverty continues to be strongly associated with agricultural dependence, low labor productivity, fragmented landholdings, seasonal employment, and ecological vulnerability. A large proportion of rural households remain dependent on small-scale farming, wage labor, or allied activities that generate unstable and climate-sensitive incomes. Limited irrigation coverage, weak access to institutional credit, inadequate storage, poor market connectivity, and infrastructure deficits further reduce resilience and productivity (NITI Aayog, 2023).

The seasonal nature of agrarian employment often produces cyclical income insecurity, especially among marginal farmers and landless laborers. During lean agricultural periods, many households rely on temporary migration, casual labor, or public employment schemes to smooth consumption. In such contexts, poverty is not only chronic but also recurrent, intensifying during climatic shocks such as floods, droughts, and crop failures.

Urban poverty, by contrast, increasingly reflects the structural realities of informal employment, precarious wage relations, insecure housing, and uneven access to urban services. While cities provide opportunities for income diversification, they also expose migrants and low-income workers to unstable labor markets, high living costs, and exclusionary housing systems. Informal work in construction, transport, domestic services, vending, waste management, and platform-based labor often lacks social security, legal protection, and stable wages.

A defining feature of contemporary poverty dynamics is that migration frequently redistributes deprivation geographically rather than eliminating it. Households escaping low-productivity rural livelihoods may enter urban informal settlements where inadequate sanitation, overcrowding, rental insecurity, and lack of formal documentation create new vulnerabilities. In this sense, rural deprivation is often transformed into urban precarity rather than fully resolved.

This rural–urban continuum has major policy implications. Poverty reduction strategies must increasingly address mobility, migrant housing, labor formalization, and portability of welfare entitlements across state and city boundaries. Without portable food security, healthcare access, and identity-linked benefits, migrant populations remain vulnerable to exclusion despite active labor participation. Thus, rural–urban poverty should be understood as a dynamic and mobile condition shaped by structural transitions in livelihoods and settlement systems.

7. Policy Interventions and Poverty Alleviation

India's progress in poverty reduction is inseparable from the expansion of welfare architecture, public provisioning systems, and improvements in state capacity. While economic growth created the macro conditions for poverty decline, the translation of growth into multidimensional well-being has depended substantially on social protection, livelihood programmes, food security systems, and basic service delivery (NITI Aayog, 2023) (Table 6).

Among the most significant interventions, MGNREGA has played a foundational role in strengthening rural income security by providing demand-driven wage employment during periods of seasonal distress. Beyond immediate consumption support, the programme contributes to rural asset creation through water conservation, land development, and connectivity infrastructure, thereby supporting longer-term livelihood resilience. Recent evidence indicates near-universal work provision among those demanding employment, highlighting its continued relevance as an anti-poverty safety net.

Food-based social protection through the Public Distribution System (PDS) and the National Food Security Act (NFSA) has been equally central in reducing hunger-related deprivation. By ensuring subsidized access to cereals and essential food grains, these systems protect poor households from price volatility and income shocks, particularly in rural and migrant communities.

The National Rural Livelihoods Mission (NRLM) has expanded the poverty reduction agenda from welfare support toward livelihood promotion and women's collective empowerment. Through self-help groups, savings networks, and microenterprise support, the programme strengthens financial inclusion, local entrepreneurship, and community-based resilience.

Housing interventions under Pradhan Mantri Awas Yojana (PMAY) have contributed significantly to improving living standards by enabling access to pucca housing, safer shelter, and improved household assets. These gains are especially important from a multidimensional poverty perspective because housing quality directly influences health, sanitation, and long-term asset security.

Similarly, the Jan Dhan–Aadhaar–Mobile (JAM) architecture and Direct Benefit Transfers (DBT) have transformed welfare delivery by reducing leakages, expanding banking inclusion, and enabling faster transfer of entitlements into beneficiary accounts. This digital infrastructure has improved targeting efficiency, although access gaps remain for digitally excluded populations.

Complementary initiatives in sanitation, rural electrification, tap water, and clean cooking fuel have had substantial effects on non-income poverty dimensions by directly reducing deprivation in health and living standards. Programmes such as Swachh Bharat, Saubhagya, Jal Jeevan Mission, and Ujjwala have strengthened the capability foundations of poor households.

The cumulative effect of these interventions has been substantial, particularly in accelerating reductions in multidimensional poverty. However, implementation quality remains uneven across states and districts. Persistent challenges include exclusion errors, regional disparities in delivery, bureaucratic bottlenecks, digital barriers, documentation gaps, and variable governance capacity. These limitations indicate that programme effectiveness depends not only on design but also on the institutional ecosystems through which welfare is implemented.

Future poverty policy must therefore move from scheme expansion alone toward adaptive delivery systems, better last-mile governance, and integrated social protection frameworks, particularly for migrants, informal workers, women, and climate-vulnerable populations.

Table 6. Major Anti-Poverty Programmes in India

Programme	Core Objective
MGNREGA	Rural employment guarantee
NRLM	Livelihood promotion
PDS	Food security
PMAY	Affordable housing
DBT	Efficient subsidy delivery

8.Emerging Challenges and Future Risks

Despite substantial progress in reducing multidimensional poverty, India's poverty trajectory is increasingly exposed to a new generation of structural risks that may slow, distort, or even reverse recent gains. The future of poverty reduction will depend not only on sustaining economic growth but also on addressing the changing architecture of vulnerability shaped by inequality, climate stress, urban informality, technological change, and hidden forms of deprivation. These emerging pressures indicate that poverty in India is evolving from a static developmental concern into a dynamic risk-management challenge (Figure 4).

8.1 Rising Inequality

One of the most significant threats to sustained poverty reduction is the persistence of rising inequality. Although economic growth has lifted millions out of deprivation, the gains have been unevenly distributed across income groups, sectors, and regions. The concentration of wealth, skills, and productive assets among already advantaged groups weakens the poverty-reducing elasticity of growth and limits the diffusion of welfare gains to vulnerable households (NITI Aayog, 2023).

This pattern is visible across both social and spatial dimensions. High-growth urban corridors, digitally connected regions, and better-governed states have translated growth into capability enhancement more effectively than lagging regions. As inequality widens, households near the poverty threshold remain highly susceptible to downward mobility during economic shocks. Thus, future poverty policy must increasingly focus on distributional justice rather than growth alone.

8.2 Climate Change

Climate change is emerging as one of the most powerful poverty multipliers in contemporary India. Floods, droughts, erratic rainfall, heatwaves, soil degradation, and water stress increasingly threaten livelihoods, particularly in agriculture-dependent and ecologically fragile regions. These risks are especially severe in floodplains, drought-prone drylands, and riverine belts such as the Brahmaputra valley.

The poverty implications of climate change are multidimensional: crop failure reduces income, heat stress lowers labor productivity, disasters destroy housing and assets, and repeated displacement weakens long-term recovery capacity. For low-income households with limited savings, insurance, or adaptive resources, climatic shocks often trigger a cycle of indebtedness and asset erosion. This transforms poverty into a recurring vulnerability condition rather than a one-time deprivation event (IPCC, 2022).

8.3 Urban Informality

Rapid urbanization has generated new pathways of opportunity, but it has simultaneously produced expanding zones of urban informality. Informal settlements, insecure tenancy, precarious wage systems, and unregulated labor markets increasingly define poverty in metropolitan and secondary cities.

As migration from rural areas intensifies, cities are absorbing large populations into low-paid service work, construction, logistics, domestic labor, and platform-based delivery systems. However, the absence of affordable housing, legal protections, sanitation infrastructure, and social security creates new forms of multidimensional deprivation. In this context, urban poverty is becoming less about unemployment and more about employment without security, shelter without tenure, and mobility without citizenship rights.

8.4 Technological Disruption

Technological change presents both opportunities and new exclusion risks. Automation, artificial intelligence, and digital platform economies are transforming labor markets at a pace that may disproportionately disadvantage low-skilled workers. Routine clerical work, repetitive service tasks, and low-end administrative functions are increasingly susceptible to automation, while platform-based labor often shifts risks from employers to workers (ILO, 2021).

Without large-scale reskilling, digital literacy expansion, and inclusive technology policies, the benefits of technological growth may become concentrated among already skilled and urban populations. This creates the possibility of technology-led inequality, where future poverty is driven less by joblessness and more by skill exclusion.

8.5 Hidden and Dynamic Poverty

A major analytical challenge lies in the persistence of poverty forms that remain under-measured in conventional frameworks. Households just above the poverty threshold, transient workers, seasonal migrants, and informal urban renters often remain statistically invisible despite high vulnerability.

This category of hidden and dynamic poverty includes populations that may not appear poor in cross-sectional surveys but are highly exposed to shocks such as illness, unemployment, climate events, or inflation. The near-poor are especially vulnerable to sudden downward mobility, indicating the need to shift from static poverty counts toward vulnerability-sensitive monitoring systems.

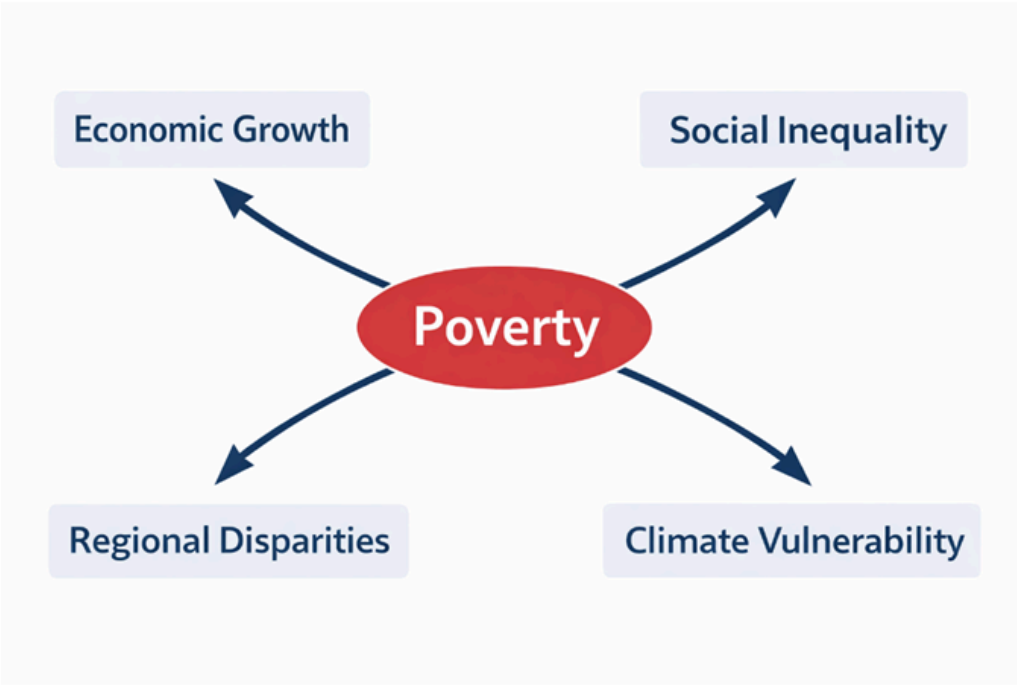


Figure 4: Structural Determinants of Poverty in India

9. Policy Pathways and Future Research Directions

A durable poverty reduction strategy in India must now move beyond static welfare expansion toward adaptive, multidimensional, and future-oriented policy systems. The changing structure of deprivation demands policy pathways that integrate resilience, mobility, capability formation, and ecological sustainability.

A first priority lies in strengthening human capital through sustained investments in education, public health, nutrition, and digital literacy. In a rapidly changing labor market, capability enhancement is essential not only for poverty reduction but also for preventing future exclusion.

Second, climate-resilient agriculture and livelihood diversification must become central to anti-poverty strategy, particularly in regions exposed to recurrent floods, droughts, and ecological stress. Diversified rural non-farm employment and climate-adaptive farming systems can reduce dependence on volatile agrarian incomes.

Third, poverty policy must include portable urban social protection systems for migrants and informal workers. Food security portability, health insurance continuity, rental housing support, and labor registration systems are essential to address the mobility of deprivation across regions.

Additional priorities include gender-responsive targeting, digital inclusion with safeguards against algorithmic exclusion, and territorially differentiated interventions for lagging states and ecologically fragile districts (NITI Aayog, 2023).

Future research should deepen the analysis of the climate–poverty nexus, urban hidden poverty, gendered deprivation, AI-driven labor transitions, and dynamic poverty trajectories using panel, longitudinal, and geospatial datasets. Emerging data systems that integrate household surveys with satellite and administrative data may significantly improve poverty diagnostics.

10. Conclusion

India's poverty transition over the past three decades represents one of the most significant development achievements of the contemporary Global South. Structural transformation, welfare expansion, improved infrastructure, and capability enhancement have together contributed to a substantial reduction in multidimensional deprivation (NITI Aayog, 2023).

Yet the contemporary nature of poverty has become increasingly multidimensional, socially differentiated, spatially uneven, and environmentally fragile. The persistence of caste-, tribe-, gender-, and region-based disparities demonstrates that poverty is not simply an income deficit but a structurally reproduced condition rooted in unequal access to opportunities, institutions, and resilience resources.

Emerging pressures particularly climate change, labor informality, urban precarity, technological disruption, and widening inequality require a conceptual shift from static poverty alleviation toward dynamic vulnerability reduction. Future policy must therefore combine inclusive growth with adaptive social protection, climate resilience, labor formalization, and territorially targeted governance.

Only an integrated development framework centered on social justice, resilience, and institutional adaptability can ensure that India's poverty reduction gains translate into long-term and equitable human development.

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Chapter 28 : Issues In Poverty Reduction, Environment, And Employment In Van Don District, Quang Ninh Province, Vietnam

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Abstract
This study investigates Van Don District's socioeconomic transformation. Its central finding is that multidimensional poverty, a skills gap, and environmental degradation are persistently unaddressed. This is due to insufficient integration with economic restructuring and growth. Drawing on anthropological surveys and data from 2021–2023, the study details how these unresolved factors undermine balanced development, social security, and sustainability. Key empirical findings highlight specific barriers to poverty reduction, deficits in vocational training, and challenges in coastal resource management. The conclusion distills the policy implications and targeted recommendations. The discussion situates these findings within the context of Vietnam's sustainable marine economic strategy. This supports a more inclusive, environmentally sustainable growth model for Van Don District.
Keywords: Poverty reduction; Environment; Employment; Quang Ninh Province; Social issues; Vietnam

Introduction

Resolution No. 36-NQ/TW (October 22, 2018) set the goal of sustainable marine economic development in Vietnam. It aims for the marine sectors to contribute 10% to GDP by 2030. It also targets coastal areas to surpass national averages in HDI and income by 2030, with a vision for 2045.On March 5, 2020, the Prime Minister issued Resolution No. 26/NQ-CP on Vietnam’s marine economic strategy to 2030 and a vision to 2045.Vietnam manages 19 coastal economic zones across 28 provinces, some of which have been given special status, posing management challenges.Marine economic development must ensure social stability, security, and human security. It should be sustainable, inclusive, efficient, and fair. Society should balance people, the environment, and economic growth. People must benefit while costs are minimized.

Development must avoid creating disadvantages or conflicts in pursuit of economic gains.This study contends that Van Don District's sustainable development requires a strategy that explicitly integrates economic advancement, social equity, and active community participation, while minimizing conflict. The core thesis is that coordinated, simultaneous resolution of multidimensional poverty, workforce skill deficits, and environmental degradation is fundamental to overcoming the district's primary development obstacles. Only through comprehensive, integrated management of these closely linked challenges can Van Don realize authentic, sustainable, and inclusive growth.

Global research finds that poverty, unemployment, education and healthcare quality, environmental pollution, prostitution, and drug use impact socioeconomic development.To study social issues, scientists often divide them into four levels: global, regional, national, and individual. These levels are closely related. For example, poverty and climate change are global problems. Family relations, such as between parents and children, are personal issues. Many social problems often have institutional causes. These institutions stem from the state or the community. Factors include governance, economic systems, education, family, religion, and communication.Social issues have both positive and negative aspects. On the positive side, they reflect societal concerns. On the negative side, they cause problems that harm people and the environment.

There are several ways to explain social issues, including social constructivism, functionalism, conflict theory, and symbolic interactionism. Each is rooted in a social context. These perspectives help explain the causes of social problems and shape solutions.In the mid-80s, Ulrich Beck introduced the concept of a "risk society"-a modern stage where social, political, ecological, and personal risks stem from innovations and challenge existing institutional controls.

Beck identified three historical stages: pre-industrial (natural risks), industrial (both human and natural risks, but manageable), and risk society (risks are incalculable and uncontrollable).

Selecting the right theoretical basis for social issues and risks is important for this research. This study applies two theories to identify social issues in the research area. The approach reveals connections, showing which social issues affect economic, cultural, political, and social development in coastal fishing communities. This basis allows reflection on policy analysis, decision-making, social problem management, and other solutions.

With economic growth and shifting marine resource use, global attention has turned to sustainable marine development, especially after the United Nations Conference on Sustainable Development (Rio+20, 2012), leading countries to commit to marine sustainability. Scientists globally, particularly in coastal nations, are now focused on these issues.

Lauer and Lauer (2013) outlined Functional Structural Theory (social order maintenance), Conflict Theory (group interests, inequality, and change), and Symbolic Interaction Theory (personal interactions shaping social life).

Best (2017) described the social constructionist perspective, explaining how people create meaning through a two-dimensional approach linking objects and subjects. Best also identified three aspects of social problems: claims, claim-makers, and troubling conditions, emphasizing recognition and the need for solutions.

Sen (2006) stressed building people's capacity to improve their situations, with Ul Haq and Alkire adding fairness, efficiency, freedom, and sustainability. This holistic framework informs human development analysis.

Lauer and Lauer (2019) categorized social problems at three levels: personal, inequality, and institutional.

Level of personal analysis: addiction to alcohol, drugs, crime, violence, prostitution.

Levels of Inequality Analysis: Rich, Poverty, Gender and Sexuality, Race, Ethnic Minorities, and Racism.

Level of social institutional analysis: issues of national governance, policy, political system, employment and the economy, education, family structure, and health care.

The level of analysis is global: War and terrorism, and the environment.

Best (2017) focused on how media-driven public perceptions define social problems and prompt policy responses, using Social Construction theory as his analytical framework.

Rubington and Weinberg (1995) and Linda et al. (2009) also addressed social issues through other theories, including value conflicts, non-structural factors, social pathology, critique, and constructivism.

The broad literature provides essential frameworks and perspectives for analyzing marine social issues in Quang Ninh province. This study draws on social constructionism, which reveals how claims and narratives shape the recognition of social problems, and on functionalism, which helps explain the persistence or transformation of social institutions. The risk society perspective highlights how modernity introduces new vulnerabilities. Though these theories enhance the analysis, care must be taken to adapt them to the local context, ensuring findings reflect empirical realities in Quang Ninh.

Global studies show that marine social problems are diverse and complex.

The FAO report (2018) on aquaculture and fisheries stated that Viet Nam was the 8th country among the top 10 in the world in fisheries (FAO 2018, p. 9). Some studies on the coastal environment include McElwee's (2010) assessment report, "*Social dimensions in responding to climate change*." Andaya (2016) wrote *Rivers, Oceans and Souls*, which assessed the impacts of climate change and sea-level rise on national economies, livelihoods, and social dimensions. These studies looked at responses from

a gender and religious perspective. In particular, McElwee emphasized that gender and religion were important for helping people adapt to climate change and overcome weather-related difficulties, such as rainstorms.

Some studies on people's reactions to changing public property management policies from a political perspective include those by Ellen (1982), Blaikie (1987), Bryant & Sinead Bailey (1997), Ruddle (1998), and Li (2000). These works helped readers understand the context of public assets such as public land and beaches under different institutions. They show how people respond to the use of these assets. Blaikie and Agrawal strongly influenced these studies. They argued that if public assets cannot create benefits for the community, it will create conflicts within the community or between the state and the people.

In general, the social issues in coastal areas are highly diverse. As society develops, more and more social problems arise, and as they become increasingly interconnected, the level of complexity also increases. The results of the World Economic Forum's 2017 global survey, which included the participation of thousands of people, identified the most serious problems facing the young generation, with climate change and environmental pollution among the most serious affecting the world today, followed by the problems of inequality, poverty, lack of education, and clean water. The studies surveyed above show that the coastal area is also not outside the context of these common social problems, and the concerns of researchers are right at the heart of contemporary social existence.

Thus, in addressing some of the theoretical problems in explaining social problems, we see the emergence of important theories by Joel Best and by the theory of conflict, as interpreted by Robert Lauer and Jeanette Lauer. In the context of Viet Nam's active membership of the United Nations and the country's commitment to the Sustainable Development Goals by 2030, we cannot forget the social explanations put forward by Amartya Sen, Mahbub ul Haq, and Sabina Alkire.

Building upon the theoretical frameworks and literature discussed above, the subsequent section transitions from general perspectives to a focused empirical analysis of Van Don district, Quang Ninh province. Specifically, it examines how the interconnected issues of poverty reduction, employment, and environmental pollution manifest in this local context. The study is based on household surveys in Van Don district, combined with in-depth observations and interviews, using an anthropological approach. The research also utilizes data from 2011 to 2021 to illustrate changes in poverty, employment, and the environment in this region.

1. The current state of multidimensional poverty

Between 2011 and 2015, Van Don district recorded 1,257 poor households (12.82%). The number of poor households declined annually, from 900 (8.47%) in 2011 to 246 (2%) in 2015 (Quang Ninh Provincial Statistics Office, 2016). During this period, the district’s economy experienced comprehensive development, though its GDP contributed only 2–2.5% of the provincial total from 2011 to 2014. In 2014, Van

Don’s total production value was 2,312 billion VND, with an average annual growth rate of 16.11% from 2010 to 2014, a decrease compared to the 19.3% annual growth seen between 2005 and 2010.

During the period 2016-2020, the growth rate is estimated at 17.9% (meeting the target set in the Resolution of 16.5% to 17%); average per capita income increased from 3,883 million VND/person/month in 2016 to 5,470 million VND/person/month in 2019, reaching 70 million VND/person/year, more than three times higher than the period 2011-2015.

Thus, it can be seen that the poverty criteria based on income in Van Don district, in particular, have exceeded the Vietnamese Government's poverty line.

Through in-depth observations and interviews, the research results show that poor and near-poor households are those with single-parent families, older adults, and families with seriously ill members. These research results are quite consistent with the current picture of poor households in Vietnam. However, due to the coastal region's characteristics, some poor households have been severely affected by recent storms.

During the period 2016-2019, a review of poor and near-poor households in Van Don district found 623 poor households (5.39%) and 408 near-poor households (3.53%).

The multidimensional poverty situation in Quang Ninh province and Van Don district has been effectively addressed. Research results show that the socioeconomic development process in Quang Ninh province over the past years has had a positive impact on improving people's lives. However, tensions persist between official policy assessments and local residents' lived experiences regarding social security indicators. To clarify the application of theory in this context, this study draws on social constructionism and conflict theory to interpret such discrepancies. Social constructionism, as presented by Joel Best, illuminates how institutional narratives define and communicate social progress, shaping public understanding through their claims. This explains why official reports may emphasize reductions in rudimentary or temporary housing, while local evidence often points to the ongoing prevalence of such conditions, highlighting the contested nature of progress in public narratives. Conflict theory further explains this divergence by focusing on the differing interests and perspectives of policymakers and affected communities, attributing the gap to underlying group tensions. Additionally, the persistent risks associated with adverse weather and development-related land acquisition are framed through functionalist and risk society perspectives, both of which emphasize the enduring vulnerabilities produced by structural and institutional dynamics despite overall socioeconomic advancement. Distilling these theoretical applications clarifies that each framework helps make sense of the observable discrepancies by connecting them to broader processes of claim-making, group interests, and structural risk, underlining the necessity of combining diverse forms of evidence and perspectives when assessing social progress.

Among the in-depth interviews, Mr. N. (owner of H.Y. Hotel) and Ms. N. (foreman of B. M. oyster farming and processing enterprise) both mentioned that Typhoon Mirinae in 2016 had a severe impact on aquaculture in this area. Ms. N. said: "*In that year, the storm destroyed about 70% of the oyster, fish, and snail cages of the people here, and my house alone destroyed more than 70% of the oyster cages,.. To overcome difficulties, I have to borrow everywhere, now I can recover temporarily".*

2. The current state of employment

Van Don District is a potential coastal economic zone in Quang Ninh Province. According to the Quang Ninh Provincial Economic Zone Management Board, from 2012 to the present, the province has mobilized and attracted over 57600 billion VND (equivalent to 2.62 billion USD) to invest in infrastructure and key projects serving the development of the Van Don Economic Zone; of which, 70% is socialized capital and 30% is state capital - mainly through public-private partnerships.

With the establishment of the Van Don Special Economic Zone, Quang Ninh province has identified key priority sectors for development as high-end tourism and culture, modern services, and high technology, thereby opening new job opportunities for local people. To prepare for the Special Economic Zone, a series of projects have brought significant changes to Van Don recently, including the Van Don Airport project, the Cai Rong urban area project, and the resettlement area project. According to the labor policy in the Draft Law on Special Administrative and Economic Units in Van Don, Businesses operating within the special economic zone are responsible for prioritizing the recruitment and employment of workers whose land has been expropriated, those subject to downsizing, and other workers who are permanent residents of the special economic zone. These include job opportunities in tourism, services, and high-tech industries. However, only a portion of the population in Van Don is qualified for these jobs because, before the establishment of the special economic zone, most of them came from agricultural and fishing backgrounds, mainly doing manual labor in fishing and aquaculture. In contrast, the new jobs in the economic zone require specific skills and professional qualifications.

In addition, a segment of the fishing industry is facing difficulties and the risk of losing its livelihood, as land reclamation projects and sand mining are polluting many tidal flats here.

According to statistics from the People's Committee of Van Don District, the locality has more than 2000 hectares of tidal flats with 800 fishermen earning their living daily by hunting sea worms, raking for clams, etc., mainly concentrated in Dong Xa and Ha Long communes. While this natural resource is of particular importance to the people of the island district, recently, the tidal flats in Van Don District have been damaged by economic and social activities, especially land reclamation for urban areas and sand dredging, causing environmental pollution and leading to a decline in many mollusk and marine species on the tidal flats.

By 2020, the district aims to have 70% of its workforce in economic sectors trained, with 85% of the service sector and 80% of the industrial sector having received training.

From a very early stage, Quang Ninh has focused on developing a high-quality workforce. The province's first breakthrough was the issuance of Resolution No. 15-NQ/TU (dated June 9, 2014) on promoting administrative reform and developing a high-quality human resource base in Quang Ninh province until 2020, with a vision to 2030.

Quang Ninh province's solutions have led to a steady increase in the percentage of trained workers from 63% in 2015 to 85% in 2020, positively impacting economic growth and making the province one of the top-performing localities nationwide. Notably, Quang Ninh province is rapidly shifting its growth model from "brown" to "green" thanks to its focus on training and on reallocating human resources from agriculture, forestry, fisheries, and mining to the service sector and high-value-added industries such as tourism, processing, and manufacturing.

Currently, Van Don district is implementing large-scale, dynamic projects, including high-end entertainment complexes, golf courses, and the Heritage Road, creating numerous opportunities to attract investors. However, the implementation of land clearance for these projects is shrinking the area of agricultural land, making training, job placement, and career chuyển đổi (from agriculture to non-agricultural) for local workers a pressing issue.

Van Don District supports vocational retraining and job creation for households and individuals directly engaged in agricultural production, in accordance with the provisions of Clause 1, Article 22 of Decree No. 69/2009/ND-CP.

Through this approach, many workers have found jobs that match their training and meet practical needs. In 2018, the district successfully organized a job fair in coordination with the Provincial Employment Service Center. The fair attracted 22 participating companies, with 88 people attending direct interviews, and 56 workers successfully passing the preliminary selection.

From 2018 to the present, Van Don district has employed 1,475 workers (including 168 workers whose jobs were created through loans from the national fund, 10 workers working abroad under contract, 717 workers working in companies, enterprises, and cooperatives in the district and province, and 580 workers with local jobs), achieving 147.5% of the provincial plan and 101.7% of the district plan. The rate of trained workers is estimated at 57.8%.

As the country enters a period of industrialization and modernization, the workforce in coastal areas faces many interrelated challenges, with unemployment remaining a critical concern. In Van Don district, these employment challenges emerge from a complex interplay of factors: policy-driven land-use changes, environmental degradation, economic restructuring, and unexpected external shocks. The ongoing reclamation of agricultural land for economic zone development, while often identified

as a primary cause of job loss, interacts with broader transformations in the rural economy and limited alternative employment opportunities for those formerly engaged in agriculture. Simultaneously, industrial waste has degraded the marine environment, undermining the fishing sector by reducing the viability of seafood harvesting and aquaculture. This environmental impact arises both from insufficient regulation and increased competition over diminishing resources, forcing many to abandon traditional occupations and contributing to a shortage of local employment opportunities. Additionally, the outbreak and recurrence of COVID-19 have exacerbated these vulnerabilities by limiting mobility and hindering economic activity. Importantly, stakeholders offer varied perspectives on these employment challenges. Local laborers often highlight the immediate impact of land loss and environmental decline on their livelihoods, while policymakers may emphasize structural economic reforms and long-term development objectives. Researchers point to the compounded effects of institutional inadequacies, regulatory gaps, and global disruptions such as pandemics. Therefore, understanding employment challenges in Van Don requires a synthesized perspective that integrates the overlapping influences of land policy, environmental conditions, economic transitions, and external disruptions, and that carefully considers these multiple viewpoints to fully account for the persistence of unemployment.

In a conversation with Mr. T, director of a vocational training center in Van Don district, he said: "*The professions selected by the Center for training are also in line with the trend of developing high-end services and tourism of Van Don. Currently, the Center is collaborating with colleges to offer 6 vocational intermediate classes for students in grades 10-12. Among them, 87 students are studying information technology at vocational intermediate schools, and 180 are studying intermediate vocational training in food processing techniques. The center focuses on the quality of foreign language and informatics training so that each student, after graduating from high school, is both cultured and skilled, meeting the needs of the labor market."* Van Don Special Economic Zone, when established, will be highly attractive to domestic and international high-skilled workers. Therefore, it requires Van Don district to make significant efforts to effectively implement the plan to train and develop human resources and labor to meet development requirements, as the district's trained workforce rate is only about 54%. In addition, greater attention is paid to quickly securing suitable housing and jobs for workers whose land is recovered, to avoid the risk of unstable resettlement and re-poverty.

At the same time, in an interview with the leader of Van Don district, he also said that it is necessary to divide vocational training groups by educational level to both provide vocational training and help them get jobs, thereby reducing poverty. Ms. T., Department of Labour, Invalids and Social Affairs of Van Don district, said: "*The district has implemented an employment program, dividing labor into groups, including: With low cultural level, they will train and create jobs on the spot with unskilled labor, simple technical requirements on a small and medium scale; a group of*

qualified workers who have undergone vocational training can work in the locality or be introduced to find jobs outside the locality depending on the training profession".

In recent years, the migration of migrant workers from coastal rural areas to urban centers in search of employment has been very intense, primarily driven by the desire for higher-paying jobs. This has increased pressure on urban employment and given rise to complex social issues, including housing, transportation, access to electricity and water, and social problems. This situation is an inevitable consequence of labor supply and demand dynamics under a market economy, especially given that many workers in coastal areas still lack sufficient employment and earn significantly lower incomes than those in urban areas. Therefore, the issue of creating suitable jobs for workers in the coastal areas of Quang Ninh province, in general, and Van Don district in particular, that match their skills and abilities, needs further research and attention.

Migration to new economic zones in alluvial plains and sandy areas within their homeland demonstrates a greater suitability to the sentiments and production practices of the local people than relocating them to distant regions. The depletion of coastal marine resources over the past years has compelled coastal residents to seek ways to expand further offshore, while simultaneously forcing them to regenerate, protect, and develop marine resources within the alluvial plains, utilizing newly discovered resources such as sandy soil, bays, and lagoons for aquaculture. However, as mentioned above, due to the impact of industrial waste, some aquaculture areas in Van Don are severely polluted, hindering local people's production development.

Data reported from Quang Ninh province shows that the unemployment rate has been steadily decreasing since 2015, from 4.61% in 2015 to 2.85% in 2019. The unemployment rate for women in 2019 was slightly lower than for men, while urban areas had a higher unemployment rate than rural areas.

The figures on job losses or underemployment do not fully reflect the labor situation caused by the COVID-19 pandemic over the past two years, or the economic restructuring from agriculture to trade, services, and industry, and the impact of other socioeconomic development policies in recent years. Most notably, there is the issue of land expropriation for the construction of Van Don airport and coastal residential areas.

The in-depth interview data reveal an alarming reality of job shortages and unemployment, affecting approximately 3,000 people in just one small research location in Ha Long commune.

Throughout the research process, the project team frequently encountered many local people, including young people who had become land brokers for real estate businesses after losing their agricultural and business land through land expropriation.

3. Current state of environmental issues

Quang Ninh is a province in the Northern key economic region and is one of 28 coastal provinces nationwide currently undergoing rapid industrialization and

modernization. It possesses many outstanding strengths, such as coal mining, port development, and marine tourism, most notably Ha Long Bay – a world natural wonder. However, the province also faces a very high risk of marine environmental pollution from coal mining, transportation, tourism, and the development of industrial zones and coastal economic zones, including the Van Don Economic Zone. These environmental challenges in Quang Ninh closely mirror trends observed in other rapidly developing coastal regions worldwide, where economic expansion often conflicts with ecosystem conservation.

Overall, water quality in coastal areas of Quang Ninh province meets most physicochemical and biological indicators; however, pollution from oil, suspended solids, and nutrients occurs in some areas. Such issues are not unique to Quang Ninh and are characteristic of coastal zones in many emerging economies, where accelerated industrial activity often leads to localized marine degradation.

Oil levels in the coastal waters of Quang Ninh province are rising in port and dock areas, including the Bai Chay tourist port and Ha Long 1 market. Signs of oil pollution have also been observed at beaches (Bai Chay, Bai Dai). The main sources of oil pollution are emissions from waterway traffic, motorboats, and onshore industrial activities, similar to patterns reported in heavily trafficked coastal corridors in Southeast and East Asia.

In areas near the river mouth, the concentration of suspended solids exceeded the permitted standard for the region by 1.34 to 2.82 times—a concern for aquaculture and fisheries conservation. At many monitoring points, the coastal seawater environment has been polluted with nutrients, such as in Dong Rui commune (Tien Yen district) and Dai Yen ward and Dien Vong estuary (Ha Long city), as well as with organic and heavy metal pollution. Compared with nutrient-loading and sediment runoff, these are recognized as persistent environmental threats across Asia's coastal aquaculture regions, where urbanization and agricultural intensification frequently intersect with fragile marine ecosystems.

In Van Don, the processing of jellyfish and oysters has altered the quality of coastal seawater. Sampling results from locations with jellyfish processing plants and locations without processing plants, at different sampling times: before, during, and one month after the jellyfish season ended, showed that DO, salinity, and pH showed little fluctuation, while BOD, COD, and TSS fluctuated significantly, especially when comparing the results of samples collected and analyzed before and during the processing season. Most notably, COD exceeded the QCVN:10:2008/BTN&MT standard for coastal seawater quality aimed at protecting aquatic life by 6.4-15.4 times. Samples of wastewater from jellyfish processing showed average TSS values exceeding the standard by 5.64-5.6 times. The average BOD5 value exceeded Standard 11 by 3.5-3.88; the average COD value exceeded Standard 11 by 2.03-3.01 times. Similar environmental pressures from aquaculture processing facilities have been

reported in coastal provinces of Thailand and China, further underscoring the shared nature of these challenges in developing maritime economies.

Marine debris, or trash at sea, includes any waste originating from human activities, production, or discarded solid materials from processing, treatment, or disposal that ends up in the marine environment. This includes plastics, metals, glass, concrete, construction materials, cardboard, polystyrene, rubber, ropes, textiles, wood, and hazardous materials. The accumulation of marine debris, particularly plastics, is a global phenomenon that affects not only Van Don but also major marine ecosystems worldwide, as emphasized by international research and United Nations assessments.

In sum, Quang Ninh's environmental issues reflect the distinct characteristics of its development process while aligning with the environmental challenges commonly encountered by rapidly industrializing and diversifying coastal regions worldwide.

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4. Causes of poverty reduction, unemployment, and environmental pollution.

Firstly, Leadership and guidance on poverty reduction in some localities are still limited; some Party committees and authorities have not shown genuine interest in decisively directing the program; the integration of socioeconomic development programs with the poverty reduction program in some localities has not been highly effective; there has been insufficient attention to directing research and development of pilot models for poverty reduction that are suitable for each region and the production and farming practices of the people for replication.

Secondly, the lives of ethnic minority people, especially in remote villages, *are* still fraught with difficulties, lacking information, and having limited access to and enjoyment of social services.

Thirdly, the majority of poor and near-poor households are concentrated in mountainous, coastal, and island areas, making poverty reduction efforts difficult to implement.

Fourthly, the results of poverty reduction are not yet truly sustainable, and the risk of falling back into poverty remains high, especially when natural disasters or epidemics occur.

In recent years, Quang Ninh province has experienced a situation where some sectors have a shortage of personnel while others have a surplus. Many graduates are unable to find jobs and are forced to work in fields unrelated to their studies, even in positions requiring significantly lower skills and expertise. This situation results in significant waste for both the state and the students, while the urban unemployment rate remains at 5.3% (2011). Statistics show that some industrial zones in Quang Ninh have thousands of university graduates working as laborers. This indicates a mismatch between supply and demand, and inadequate career guidance for high school students leads them to choose professions based on intuition and public opinion, resulting in a "surplus of academics and a shortage of skilled workers."

Environmental considerations remain insufficiently integrated into sectoral planning, resulting in a disconnect between policy intentions and actual practices. Key sectors such as industry, tourism, and infrastructure often prioritize economic growth over comprehensive environmental assessments and sustainable management. This gap

is compounded by weak sectoral coordination and ineffective enforcement, limiting accountability for negative environmental outcomes. In Van Don district, several tourism projects were approved and accelerated before completing the required environmental impact assessments. For example, resort complexes near Bai Tu Long Bay were developed without a full evaluation of their impacts on coastal ecosystems, highlighting how environmental safeguards are frequently neglected. The lack of coordinated water resource planning further undermines regulatory effectiveness and data collection, hindering informed management. Consequently, sectoral development often proceeds without alignment to broader environmental protection goals, leading to recurring ecological costs that counteract many economic gains.

The incomplete or inadequate environmental protection legal system creates difficulties in management.

According to the Van Don Economic Zone Management Board's report, as of September 14, 2020, there were a total of 146 research and investment projects in the Van Don island district. Of these, 38 projects were basically completed; 28 projects had their plans revoked (11 projects had land allocated and land revocation decisions issued; 17 projects had terminated investment activities,/canceled plans/revoked research and planning approvals); 27 projects had been allocated land and were under investment; and 53 projects had not yet been allocated land. Notably, among the 27 projects that had been allocated land and were under investment, 16 projects were behind schedule. The main reasons were obstacles to compensation and land clearance, as well as adjustments to the new plan.

In addition to increased pollution, tourism development will also lead to a decline in biodiversity due to the establishment of tourist routes through sensitive areas and restaurants that purchase wild animals and plants for food and souvenirs.

Unemployment in the coastal area of Van Don (especially among young people) is one of the causes of social ills, leading to political instability, disorder, and social insecurity, which malicious forces can exploit. The increasing number of young people from rural areas migrating to urban areas and industrial zones in search of work will lead to a rapid, significant increase in the migrant population, creating overcrowding, worsening housing and living conditions, and giving rise to numerous negative consequences in these areas. On the other hand, the migration of the workforce to other areas in search of employment has led to difficulties in managing and implementing plans for reserve forces, militias, and civil defense, including for young people of military service age, in rural areas. This situation not only hinders the timely mobilization of human resources required for national defense, thereby affecting local economic development, but also negatively impacts rural security at the local and national levels.

Labor migration has a significant impact on the labor force in areas of migration, particularly on the labor structure. Currently, many rural areas are experiencing a shortage of young workers, particularly male laborers who were

previously the primary workforce for farming households. These men have migrated to seek temporary employment and livelihoods in urban areas and industrial zones. The remaining agricultural and rural workforce mainly consists of the elderly, women, and children, who have fewer opportunities and advantages in terms of mobility and job seeking.

Conclusion

The research results also show that multidimensional poverty is affected by the COVID-19 pandemic, as seafood production is disrupted and the risk of short-term income reduction is imminent. Therefore, income can influence the measurement of multidimensional poverty.

Regarding employment, the young, trained workforce is dominant in Quang Ninh province, contributing increasingly to local socioeconomic development. The labor structure is also shifting from agriculture, forestry, and fisheries to industry, particularly trade and services. It can be seen that the economic restructuring and socioeconomic development orientation of Quang Ninh province over the years have positively contributed to changes in the labor structure. Initial research results indicate that industries related to the sea, such as aquaculture and seafood processing, tourism, and hotels, are rapidly developing. In turn, employment increases income, reduces poverty, and helps a segment of the population become more prosperous by enabling them to benefit from local economic restructuring.

However, survey results from one research site indicate that a segment of the population is experiencing job losses and underemployment due to land reclamation for marine economic development, the construction of Van Don airport, and marine environmental pollution. Notably, in-depth interview data from Ha Long commune reveal that approximately 3000 people have been affected by job shortages and unemployment as a direct result of land expropriation and environmental degradation associated with these development projects. By clearly linking these observed job losses to specific mechanisms such as land use changes and environmental decline, the empirical findings reinforce the study's central thesis: persistent imbalances among economic growth, employment, and environmental sustainability are not merely abstract challenges, but are evidenced in the tangible disruptions to livelihoods in Van Don District. This direct correspondence between localized data and the broader thesis underscores the ongoing difficulty of developing strategies that equitably integrate economic, social, and environmental objectives.

Regarding environmental issues, the research findings indicate that environmental pollution constitutes a multifaceted and persistent challenge in Quang Ninh province. Notably, pollution, including coastal contamination, deteriorating air quality, and aquaculture-related waste, continues to impact residents' daily lives. The data reveal that recent economic and tourism developments have not only introduced additional sources of pollution—such as concentrated waste from tourism and aquaculture activities at sea—but have also aggravated pre-existing issues, including

coal dust and household waste. The significance of these findings is further underscored by local perceptions: despite Van Don district's status as a coastal economic zone prioritizing tourism and trade, survey data indicate that as many as 42% of residents feel unable to swim safely in the sea due to water pollution. (Thai et al., 2019) This statistic highlights the tangible, immediate consequences of environmental degradation on quality of life and indicates that environmental hazards are directly undermining both public health and the viability of key economic activities, such as tourism.

The results on the current state of aquaculture and Bai Tu Long National Park in Van Don also show that aquaculture density is currently too high. The risks of aquatic and seawater pollution are alarming. People are disregarding profits from aquaculture to cut down forests and encroach on the buffer zone of the National Park for aquaculture. The consequences of economic structural changes have not yet solved the problem of marine and coastal pollution.

This section synthesizes actionable policy recommendations and their implications, rooted in empirical findings on multidimensional poverty, employment challenges, and environmental degradation in Van Don district, Quang Ninh province. To enhance clarity and practical orientation, the recommendations are organized thematically as follows:

- Poverty Reduction and Economic Empowerment:

• Strengthen the direction and management of poverty reduction programs at all administrative levels.

• Invest in information infrastructure for the poor to ensure access to resources and raise public awareness of poverty reduction efforts.

• Promote the transfer and application of scientific and technological advancements to improve the value of agricultural, forestry, and fishery products for poor and newly non-poor households.

• Develop vocational training programs tailored to the requirements of high-tech industries, supported by practical workplace-based training and job-placement assistance, drawing on international best practices.

- Environmental Protection and Public Awareness:

• Actively raise public awareness regarding marine economic development, its challenges and opportunities, and the critical need to balance economic, social, and environmental development.

• Design and implement adaptation strategies for coastal livelihoods and ecological protection across key sectors, with broad participation from stakeholders at various levels.

• Implement practical environmental management actions, such as hazard mapping and freshwater conservation plans.

• Adopt a regional, community-based approach to managing coastal natural resources.

These recommendations explicitly acknowledge the complex and often competing objectives in policy implementation. For instance, promoting economic development may increase environmental stress, while stringent environmental regulations could limit immediate growth or employment opportunities. Similarly, workforce training investments are essential for long-term resilience but may not yield immediate benefits for vulnerable populations, potentially leading to short-term instability. Therefore, synthesizing these recommendations requires a careful balance of economic, social, and environmental priorities, along with transparent recognition of necessary trade-offs and their potential local impacts. Policymakers, local authorities, and community stakeholders should participate in evidence-based, transparent deliberation to evaluate policy options, prioritize based on contextual needs, and establish mechanisms for ongoing monitoring and adaptive adjustment as conditions change.

- Regarding poverty reduction and economic empowerment:

1. Local authorities must continue to innovate the direction and management of poverty reduction programs at all levels throughout the 2026-2030 period.
2. To concretely enhance information access for the poor, policymakers should prioritize expanding affordable broadband internet coverage in underserved communities, establishing community digital centers equipped with trained staff to assist users, and creating localized, multilingual online platforms that regularly disseminate timely policy updates and comprehensive information on available social services. These measures must be complemented by targeted outreach programs, such as mobile information units and training workshops, to ensure that vulnerable populations, including those in remote areas or with limited digital literacy, can effectively utilize these resources. Through these concrete steps, access to essential information will improve, thereby strengthening the efficacy and public awareness of poverty-reduction initiatives.
3. The transfer and application of scientific and technological advancements must be promoted to enhance the value of agricultural, forestry, and fishery products for poor and newly non-poor households.
4. Greater attention should be paid to designing and implementing vocational training programs that are specifically aligned with the skill requirements of high-tech industries, such as information technology, advanced manufacturing, and modern aquaculture. Informed by international best practices, such as the dual vocational education and training (VET) systems in Germany and Switzerland, these programs should integrate targeted curricula, practical workplace-based training, and coordinated job-placement support. This approach, which emphasizes strong linkages between training providers and employers (OECD, 2018), enables poor households to access sustainable employment opportunities and thereby improve their livelihoods.

In terms of environmental protection and public awareness:

1. Public awareness needs to be actively raised regarding the marine economic development strategy, its inherent challenges and opportunities, and the absolute necessity of balancing economic, social, and environmental development.
2. Adaptation strategies for coastal livelihoods and ecological protection must be developed urgently across sectors such as maritime transport, fishing, aquaculture, crop cultivation, and livestock farming.
3. These adaptation strategies must be developed collaboratively, with participation from local agency representatives, technical experts, mass organizations, and households.
4. Practical environmental management actions should be implemented, including the creation of hazard maps and the development of freshwater conservation plans.
5. A regional approach to community-based coastal natural resource management should be adopted to effectively manage local ecosystems.

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Chapter 29 : Narratives of Extremism: Media, Identity, and the Digital Reconstruction of Radicalisation

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Abstract

This chapter examines the elaborate processes by which digital media cultivate and disseminate accounts that contribute significantly to radicalisation in contemporary society. In a landscape characterised by unprecedented speed, connectivity, and an overwhelming abundance of information, extreme doctrines rarely appear as abrupt phenomena. Instead, they develop through accounts that offer individuals emotional certainty, a feeling of collective belonging and moral absolutism. The chapter examines how digital media construct and magnify "us versus them" mentalities via mechanisms such as repetition, emotional reinforcement, symbolic representation and algorithmic prioritisation, rendering extremist narratives both persuasive and socially normalised. This exploration draws on interdisciplinary insights from media studies, sociology, psychology, and political communication. It asserts that narratives serve dual roles: as conduits for ideological dissemination and as frameworks for negotiating identity, belonging, and perceived insecurity. The discussion particularly focuses on the roles of algorithmic curation, echo chambers, the aesthetics of digital storytelling, and emotionally immersive online communities in crafting ideological worlds that appear coherent and resistant to critique. Methodologically, the chapter adopts a conceptual and analytical approach, supported by contemporary examples from digital platforms and online ideological communities. It further examines the psychological and social conditions that heighten individuals' susceptibility to extremist narratives, including experiences of alienation, identity fragmentation, loneliness, and the search for meaning amid social uncertainty. The research finds that radicalisation within digital culture arises as a result of interplay between media infrastructures, affective narratives and intrinsic psychological needs. Extremist narratives gain traction by offering certainty, recognition and a sense of belonging during periods of instability and social anxiety. Ultimately, the chapter stresses the critical need for improved media literacy, ethical platform governance, critical digital education and socially inclusive strategies to successfully address online radicalisation.

Keywords: Radicalisation, Digital Media, Extremist Narratives, Identity Formation, Algorithmic Culture

Introduction

The proliferation of digital media has indelibly altered the landscape of communication, information consumption, identity formation, and the dynamics of political and cultural engagement. In contemporary society, social networking sites, streaming services, discussion forums and algorithmically curated cyber spaces have become central in shaping the quotidian experiences of global communication. The internet has surpassed its origin as a simple technological conduit; it has metamorphosed into an intricate artistic and affective milieu where people negotiate complex intersections of identity, belonging, insecurity and ideology. While these digital technologies have encouraged opportunities for greater democratic engagement and global connectivity, they have also expedited the dissemination of extremist rhetoric and polarising ideologies (Castells, 2010).

Historically, radicalisation was predominantly linked to organised extremist factions, direct recruitment, clandestine political movements, or geographically restricted communities. In contrast, the contemporary environment of radicalisation predominantly unfolds within virtual ecosystems, where ideological exposure is a gradual, pervasive phenomenon deeply embedded in everyday online interactions. Individuals encounter political narratives not only through overt propaganda but also through cultural mechanisms such as memes, influencer-driven content, gaming environments, podcasts, online humour, livestreaming, conspiracy theories, and emotionally evocative short-form media. The digital culture of radicalisation thus operates less as a sudden ideological change and more as a process of cumulative narrative acculturation.

This evolution necessitates a review of the contours of extremism in the modern society. Radicalisation in digital contexts does not arise merely from exposure to violent ideologies; rather it is formed by emotionally powerful accounts that confer a sense of certainty, belonging and ontological meaning. Extremist discourses often extract complex political and social dilemmas into emotionally powerful dichotomies such as "us versus them", "civilisation versus threat" or "victim versus oppressor". These binaries reduce ambiguity and offer seemingly coherent explanations for social anxieties, economic disquiet, cultural transformations or personal discontent (McLuhan, 1964).

The architecture of digital media amplifies these dynamics. Designed to optimise user engagement, algorithms often privilege emotionally charged content, as outrage, fear,

and controversy elicit heightened interaction. Continuous exposure to homogeneous viewpoints within echo chambers fortifies ideological tenacity while curtailing engagement with divergent perspectives. Consequently, these online domains not only mould political inclinations but also reshape emotional perceptions and the very fabric of social reality.

However, susceptibility to extremist paradigms goes beyond the mechanisms of technological systems alone. Psychological and social factors critically shape this vulnerability. Experiences of loneliness, alienation, identity dissonance, political distrust, economic instability and emotional insecurity may increase receptivity to accounts that promise communal belonging as well as ideological coherence. Digital platforms usually provide emotional affirming spaces where people struggling with disconnection may find recognition, solidarity and meaning.

This chapter explores the interplay among digital media, identity construction, and extremist narrative formation. Drawing on media studies, sociology, political communication, and psychology, it examines how narrative structures, algorithmic influences, emotional reinforcement, and symbolic communication drive contemporary radicalisation. The methodological approach is rooted in conceptual analysis, informed by interdisciplinary scholarship and current digital phenomena. The chapter argues that radicalisation within digital culture arises from the confluence of media infrastructures, emotionally charged storytelling, and fundamental human psychological impulses.

Methodology

This chapter embarks on an intellectual journey through the realms of media studies, sociology, psychology, and political communication, eschewing traditional empirical fieldwork in favour of a more reflective critique of existing literature and digital milieus. By delving into the intricate tapestries of online narratives, it seeks to illuminate how these narratives intertwine with the processes of radicalisation.

Employing a robust conceptual framework, the analysis scrutinises how narratives are woven and disseminated through algorithmic mechanisms, how identities are sculpted within digital spheres, and how emotions are harnessed to reinforce ideologies online. This exploration is not confined to the abstract; rather, it is enriched with tangible illustrations drawn from social media platforms, ideological enclaves, and the cacophonous arena of digitally mediated political dialogue. These examples ground the theoretical musings, offering a concrete lens through which to view the complex interplay between technological architectures and the psychological and societal susceptibilities they exploit.

The interdisciplinary nature of this inquiry permits a nuanced examination of how digital infrastructures not only reflect but also exacerbate personal and collective

vulnerabilities, serving as breeding grounds for extreme ideologies in our contemporary digital age. This approach underscores the imperative to understand the dynamic interrelations that shape extremist narratives and urges scholars to consider the multifaceted influences at play in the digital environment.

Radicalisation in the Context of Digital Culture

In today's digital culture, the concept of radicalisation demands a sophisticated and subtle understanding. No longer merely the adoption of extreme ideological beliefs that lead to hostility or violence, radicalisation is now understood as an intricate, multidimensional process formed by social, emotional, cultural, political and technological forces. This shift in understanding challenges the outdated notion of radicalisation as a sudden ideological conversion, implying instead that it involves a long journey defined by emotional reinforcement, identity development and social immersion.

Historical analyses of radicalisation emphasised the importance of structured groups, magnetic leaders and tangible recruitment operations. These processes depended on direct engagement, ideological indoctrination and collective bonds of localised networks. However, the advent of the digital age has dramatically reshaped these schemes. In the sphere of social media and online communication, the dissemination of militant doctrines exceeds traditional organisational boundaries, enabling these accounts to proliferate autonomously. Individuals now can encounter extremist content without any direct interaction with established extremist entities.

The digital sphere promotes radicalisation through a complex approach. Primarily, it offers unprecedented accessibility; extreme doctrines can be instantly disseminated beyond geographic boundaries, contacting diverse audiences irrespective of their socio-cultural backgrounds. Additionally, digital mediums bolster anonymity, lessening the repercussions associated with espousing extreme or contentious views. Moreover, the immediacy and viral character of online communication intensify affective reactions, with sentiments such as fear, indignation and enmity rapidly propagating through digital networks, thus amplifying ideological polarisation.

The digitalisation of political discourse has further revolutionised the stylistic presentation of ideological communications. Contemporary extremist propaganda often resembles the vernacular and visual aesthetics prevalent in the mainstream digital culture. These accounts, departing from conventional political rhetoric, manifest through memes, cinematic videos, humour, podcasts, livestreams, influencer content and gaming cultures. This tactical adaptation renders the material entertaining, relatable and emotionally meaningful, allowing individuals to initially encounter fanatical doctrines through ostensibly innocuous or culturally ingrained forms of communication.

Recommendation algorithms on platforms including Facebook, Instagram, X, TikTok and YouTube play a central role in this dynamic. These systems, engineered to maximise user involvement, prioritise content that elicits strong emotional reactions or prolonged interaction, as such content drives advertising revenue and increases platform activity. A notable example of this phenomenon occurred in 2019, when a report by the New York Times highlighted how YouTube's recommendation system steered users toward increasingly extreme political content, including conspiracy theories and hate speech, even if their initial searches were not explicitly ideological. Similarly, investigations into TikTok have shown that users can be rapidly exposed to extremist material through algorithmic suggestions after engaging with only a handful of related videos. Given this framework, extremist narratives frequently gain visibility due to their emotionally charged nature, gradually exposing users to increasingly polarised material through algorithmic suggestions rather than explicit ideological searches.

Furthermore, digital radicalisation seamlessly integrates into the texture of daily online life. Politician stories no longer exist in isolation from entertainment or social discourse. Instead, ideological messages are intertwined with gaming communities, lifestyle content, meme culture, online discussions and influencer commentary. This conflation normalises extremist narratives, rendering them more commonplace than anomalies or exceptions.

Digital media also facilitate the formation of transnational ideological communities, in which individuals connect across geographical and cultural separations using shared grievances, apprehensions and symbolic identities. These communities strengthen collective identity while fostering animosity toward perceived outsiders. Thus, radicalisation in digital culture acts through a combination of ideological indoctrination and emotional involvement, mediated by identity construction.

The metamorphosis of extremism within the digital milieu underscores that modern radicalisation cannot be reduced to violence or political ideology alone. It must be examined as a mediated phenomenon, shaped by emotional engagement, technological frameworks, narrative persistence, and communal belonging. Digital media does more than transmit extremist ideologies; it creates environments in which these ideological constructs gain emotional resonance and social significance.

Narratives and the Construction of Extremist Ideologies

Narratives occupy a pivotal place in human communication, serving as the primary vehicle through which individuals engage with and interpret the world. These structured stories not only organise personal and collective experiences but also imbue

them with moral significance, thereby shaping communal identity. The allure of extremist ideologies, therefore, stems less from their doctrinal substance and more from their capacity to offer emotionally resonant interpretations of prevalent social anxieties, political upheavals, and personal insecurities. Such narratives distil the complexities of reality into morally charged dichotomies populated by heroes, victims, adversaries, and looming threats.

A quintessential characteristic of extremist narratives is their reliance on binary oppositions—constructs such as "us versus them," "good versus evil," "civilisation versus decay," or "victim versus oppressor." These reductive frameworks eliminate ambiguity, supplying emotional certainty amid periods marked by instability or bewilderment. This reductionism is especially compelling during times of economic precarity, cultural metamorphosis, political cynicism, or social upheaval, as it offers ostensibly clear explanations for multifaceted predicaments.

Narratives are equally crucial in shaping a person's identity. Individuals gravitate towards stories that clarify their sense of self, delineate their place in the world, and signal potential threats to their identity. Extremist movements adeptly exploit these intrinsic emotional yearnings by developing narratives that transmute personal complaints into collective struggle. Experiences of alienation, indignity, or exclusion are recontextualised as manifestations of larger systemic betrayal or ideological contention, thereby imbuing personal anxieties with political importance (Pariser, 2011).

The emotional tenor of extremist narratives cannot be overstated. They deftly evoke fear, resentment, anger, humiliation, nostalgia, and perceptions of injustice to foster emotional allegiance to ideological movements. The digital media landscape amplifies these dynamics, as emotionally resonant content tends to attract higher engagement and visibility. Within algorithmically driven online spaces, emotionally incendiary narratives propagate more rapidly than those grounded in nuance or analytical depth.

Symbolic communication further strengthens extremist narratives. Symbols, slogans, hashtags, visual motifs, and coded language not only foster collective identity but also galvanise emotional solidarity. Online extremist communities frequently rely on memes and symbolic lexicons that reinforce belonging while demarcating insiders from outsiders. Through repetition, these symbolic systems become normalised, incrementally embedding ideological presuppositions into the quotidian fabric of communication.

Victimhood narratives occupy a particularly powerful place in extremist discourse. Such groups often cast themselves as culturally threatened, politically stifled or socially marginalised. These accounts portray perceived adversaries as culpable for social decline, economic vulnerability, demographic changes or moral degeneration.

By adopting a victimhood stance, extremist groups rationalise antagonistic actions as defensive or resistance measures. Such stories manipulate emotions, stoking fear and resentment toward imagined threats.

Crucially, extremist narratives do not exert their influence solely through overt indoctrination. Radicalisation tends to evolve incrementally, facilitated by sustained exposure to emotionally charged stories embedded within digital ecosystems. Individuals gradually become enmeshed in ideological realms that shape not only political convictions but also emotional perceptions and social identities. Thus, extremist narratives function as interpretative frameworks through which individuals construe reality itself.

Digital media further enhances narrative immersion by fostering participatory culture. Unlike traditional mass media, digital platforms empower users to actively engage with, replicate, and disseminate ideological content. Participation in discussions, meme creation, video sharing, and contributions to symbolic communities deepen emotional investment, as individuals shift from passive consumers to active contributors. Ideological reinforcement is thereby achieved through collective interaction and social validation.

Another salient feature of extremist stories is their pliability. In the contemporary digital domain, these accounts manifest remarkable flexibility, evolving in response to cultural trends, political developments, or platform-specific cultures. Extremist communities frequently re-calibrate their messaging tactics to appeal to younger groups, employing humour, irony or pop culture references. This adaptability itself makes sure that extremist narratives continue to be both culturally relevant and emotionally compelling amidst rapidly changing digital environments.

In essence, the persuasive power of extremist narratives lies in their ability to provide certainty during uncertainty. In societies beset by rapid transformations, fragmented identities and political instability, the attraction of emotionally coherent stories becomes particularly evident. Extremist narratives offer the promise of belonging, recognition and moral clarity in times when individuals are engulfed by disorientation or insecurity. Consequently, radicalisation emerges not simply as a consequence of ideological indoctrination but as a manifestation of the emotional and symbolic milieus created through digital storytelling.

Algorithms, Echo Chambers, and Digital Infrastructures

The assertion that digital platforms function as impartial conduits of communication is increasingly untenable. Their very architecture, composed of intricate algorithms and market-driven frameworks, exerts a profound influence over the content users engage

with and internalise. In the realm of social media, platforms are fundamentally engineered to optimise user engagement, a design principle that simultaneously increases visibility, enables extensive data harvesting, and boosts advertising profits. This orientation often results in an algorithmic preference for emotionally charged and divisive content, overshadowing more nuanced or analytical discourse.

The role of recommendation algorithms in curating ideological content cannot be overstated. These algorithms meticulously parse user engagements—likes, shares, comments, and viewing habits—to suggest content that aligns with existing preferences. Over time, this process can encapsulate users within insulated information ecosystems, often referred to as echo chambers or filter bubbles, where homogeneous viewpoints are incessantly echoed. Recent research into YouTube's recommendation systems has raised concerns that engagement-driven suggestions can amplify polarising content (Ribeiro et al., 2020). In parallel, during the COVID-19 pandemic, misinformation and conspiracy communities experienced rapid growth on platforms like Telegram, Facebook, and TikTok. This trend highlights how crisis situations can exacerbate online ideological reinforcement and foster distrust in institutions.

Within these information bubbles, exposure to divergent perspectives becomes increasingly scarce. The cyclical reinforcement of identical ideologies fosters a sense of certainty and dismisses opposing views as erroneous or even threatening. Consequently, individuals may inaccurately perceive their digital environment as a representation of the wider social landscape, a perception exacerbated by the structured suppression of dissenting narratives. This phenomenon contributes to heightened polarisation, as the echo effect stimulates emotional animosity towards ideological opponents.

Furthermore, digital frameworks facilitate networked radicalisation, transcending geographical boundaries. Online communities coalesce rapidly around shared grievances, fears or ideologies, creating emotionally charged environments that strengthen group identity and collective cohesion. Unlike conventional extremist groups hindered by physical borders, these digital assemblies operate ceaselessly and across national borders.

The concept of virality also plays a pivotal role in reinforcing ideological stances. Social media platforms incentivise content that is succinct, emotionally resonant, and easily disseminated. Consequently, the complexities of political discourse are distilled into oversimplified narratives suited for rapid online propagation. Extremist content is particularly adept at exploiting these conditions, often leveraging emotional urgency and evocative storytelling as tools of persuasion.

Additionally, internet platforms have accelerated the convergence of political discourse, entertainment and everyday social interaction. Ideological content now

permeates diverse online realms—podcasts, livestreams, gaming environments, influencer channels, and even humour-laden communication. This omnipresence allows extremist narratives to reach users incidentally, through entertainment or cultural engagement, rather than through explicit political channels. Such integration effectively normalises extremist content by embedding it in the structure of routine digital experiences.

Financial imperatives driving digital services worsen these dynamics. Platforms benefit financially from user participation, regardless of the ideological or emotional repercussions of content dissemination. Content that incites anger, fear or outrage tends to attract higher engagement, making it more prominent within algorithmic recommendations. Therefore, the commercial underpinnings of these platforms inadvertently valorise emotional extremism and ideological polarisation.

Crucially, algorithms do not merely mirror user inclinations; they actively shape them. Persistent exposure to homogeneous narratives can gradually influence emotional responses and political beliefs, and shape perceptions of reality. Individuals risk becoming ensnared in ideological silos that amplify emotions such as fear and resentment, while marginalising alternative viewpoints. Radicalisation thus emerges from the interplay between these technological systems and human cognitive processes.

Digital frameworks further facilitate the mainstreaming of extremist rhetoric. Once confined to the fringes, ideas can gain traction and social endorsement through continuous online dissemination. The veil of online anonymity diminishes social accountability, encouraging individuals to express extreme or hostile opinions more freely. Through constant repetition and communal reinforcement, fanatic doctrines may gradually intertwine with everyday digital communications.

In examining the nexus between algorithms and radicalisation, it is clear that digital extremism transcends the confines of individual ideology. It is greatly shaped via technological systems designed for maximum visibility, engagement and affective impact. While digital mediums do not originate extremism per se, they provide a fertile infrastructure in which radical narratives are amplified, reiterated and rendered emotionally compelling.

Identity, Alienation, and Psychological Vulnerability

The attraction of extremist narratives isn't only rooted in technical infrastructure; rather, it is closely linked to the psychological and social contexts in which individuals live. Those who experience alienation, loneliness, insecurity, fragmented identities or political distrust are especially vulnerable to accounts that promise emotional certainty

and collective belonging. Thus, contemporary extremism transcends mere political categorisation; it must be examined as a psychological and emotional phenomenon intimately tied to the pervasive experiences of uncertainty and disconnection endemic to modern life.

Our societies are undergoing rapid cultural shifts, economic volatility, escalating political polarisation, and identity fragmentation. The traditional pillars of belonging—familial structures, religious affiliations, local communities, and stable political loyalties—have eroded across many contexts. Consequently, uncertainty about one's societal position has become commonplace, and digital communities often step in to fill this void by providing recognition, solidarity, and emotional validation.

This pattern is particularly marked among younger individuals dealing with the complexities of digital culture. Adolescents and young adults increasingly turn to social media for identity formation, seeking approval and communal participation. Internet platforms prioritise visibility, performance and interaction, pressuring individuals to define themselves within this digital framework. Extremist factions take advantage of these weaknesses by offering well-defined collective identities, supportive communities and grand historical stories. For persons grappling with insecurity or isolation, such communities may appear empowering and meaningful (Turkle, 2011).

Uncertainty's psychological impacts further fuel radicalisation. In times of instability or ambiguity, people often seek cognitive closure. Extremist ideologies offer emotionally comforting explanations by providing absolute truths and clearly demarcated adversaries. These ideologies simplify complexity and ease the anxiety born of uncertainty. Amidst political crises, social unrest, or economic duress, such narratives gain appeal by imposing a semblance of order and predictability.

Alienation increases susceptibility to extremist narratives. Individuals who perceive themselves as detached from social institutions or marginalised from the mainstream may view extreme doctrines as a lens to understand their frustrations. Experiences of humiliation, loneliness or marginalisation are recast as symptoms of a wider societal betrayal. Ideological narratives, therefore, elevate personal suffering to a matter of collective significance, transforming emotional vulnerability into a political identity.

The quest for meaning further underpins the appeal of extremist movements. Those gravitating towards extremist circles often seek not violence at first, but acknowledgement, purpose, or emotional inclusion. Extremist narratives ingratiate themselves by imbuing followers with a sense of historical importance and moral relevance, elevating ordinary individuals into engaged participants in grand ideological conflicts. This promise of purpose becomes particularly enticing in contexts where affective isolation or existential uncertainty prevails (Bauman, 2000).

Digital services intensify these emotional experiences by allowing constant interaction and validation. Features such as likes, shares, comments and participation promote a sense of recognition and inclusion. These online communities provide immediate affective feedback, strengthening ideological loyalty through social reinforcement. Over time these gratifying interactions cement group identity and deepen commitments to ideological narratives (Zuboff, 2019).

Further, the human penchant for certainty and simplicity plays a key role in radicalisation. The complications of political reality often engender uncertainty and unease. Extremist narratives distil these complications into emotionally accessible stories, populated by victims, heroes, enemies and threats. Such storytelling offers psychological solace by eradicating ambiguity and forming clear moral delimitations. The appeal of extremism, then, is often rooted not simply in ideological fervour, but in the emotional comfort of certainty.

The digital cultural environment contributes to identity fragmentation as individuals traverse diverse online personas across platforms. Social media fosters perpetual comparison, performance pressure, and emotional exposure, potentially exacerbating feelings of insecurity, inadequacy, or disconnection. Extremist narratives deal with these insecurities by offering stable identities and ideological certainty that promise collective belonging.

Interpreting psychological vulnerability as an individual weakness reduces the complexity of radicalisation. It arises from the confluence of emotional needs, social conditions, technological frameworks and mediated environments. Digital culture magnifies these weaknesses, forming spaces where identity, emotion and ideology become intricately intertwined.

Recognising the multiple origins of vulnerability has important real world implications. Interventions and policies should move beyond focusing solely on people and address the wider social and technological contexts which underpin radicalisation. For example, designing support systems that foster social connection and resilience, integrating mental health resources within online communities, and developing educational programs that strengthen digital and emotional literacy can help reduce susceptibility to extremist narratives. Institutions should collaborate to create inclusive environments, both online and offline, where individuals can find recognition and belonging outside of radical milieus. These approaches directly connect theoretical understanding to actionable strategies, supporting the development of more comprehensive and effective responses to radicalisation.

The Aesthetics of Digital Extremism

In contemporary extremism, reliance on aesthetics and media performance has overshadowed the conventional emphasis on formal ideological instruction. Unlike earlier propaganda paradigms that predominantly featured speeches, manifestos or printed texts, today's digital extremism uses the visually dynamic and emotionally powerful elements of online culture to disseminate its message. This metamorphosis allows extremist movements to translate ideology into participatory experiences that enthral viewers on an emotional level.

Fundamental to this new wave of ideological communication is the power of the graphic narration. High-calibre editing, cinematic visuals, symbolic imagery, dramatic soundscapes and riveting narratives coalesce to create immersive experiences that sustain engagement. By mimicking the aesthetics of mainstream entertainment media, extremist propaganda cloaks ideological content in a veneer of modernity and identification, thus enhancing its emotional impact. This professionalisation of digital propaganda shows how adept extremist groups have become in the task of navigating the cultural logic inherent in social media ecosystems.

The deployment of humour and irony is particularly strategic in the context of digital extremism. Memes, satire and ironic formats propagate extremist ideas under the guise of harmless content. Initial engagement with such material may be driven by a pursuit of entertainment, yet it often results in the subliminal absorption of ideological undercurrents embedded in the humour. The intrinsic ambiguity of this communication method complicates the identification and regulation of extremist narratives, as they often masquerade as mere "jokes," effectively normalising hostility and prejudice.

Memes play a significant role in the radicalisation process. By condensing complex political ideas into emotionally powerful visual symbols, memes allow quick dissemination and make sharing easier. Their humour and availability encourage widespread circulation, and constant exposure gradually renders ideological assumptions normative. Therefore, meme culture serves as a trifecta of entertainment, symbolic exchange and ideological reinforcement (Jenkins, 2006).

Moreover, gamification plays a central role in the radicalisation journeys of individuals in cyberspaces. Internet platforms reward participation, visibility and competition, which can normalise aggressive behaviours and ideological tribalism. In these connected virtual spaces, validation is contingent on engagement and performance. Communities centred on gaming, livestreams and forums often perpetuate norms of hyper-masculinity, hostility and adversarial identity politics, intertwining ideological conflicts with entertainment and social relations.

Emotional immersion, an additional hallmark of digital extremism, deeply shapes ideological adherence. Constant exposure to fear, outrage, hostility, and insecurity reshapes emotional perception over time, habituating individuals to interpret reality through the lens of perpetual threat and conflict. These environments cultivate heightened alertness to perceived dangers, thereby fortifying ideological commitment through an emotional framework.

Extremist aesthetics often mirror the conventions of mainstream influencer culture. Online personas seamlessly weave ideological messages into lifestyle content, motivational dialogues, or entertainment-driven content. Platforms such as podcasts, livestreams, and short-form videos often blur the line between political discourse and everyday digital interactions. By embedding political messaging within familiar entertainment formats, extremist narratives gain social acceptance and cultural traction.

Furthermore, music and sound design are integral to extremist communication strategies, with dramatic scores, emotionally charged soundtracks, and cinematic audio effects deepening emotional immersion. Indeed, the emotional atmosphere is as crucial as the ideological content, allowing extremism to be experienced not merely on an intellectual level but also through aesthetic and emotional channels.

Thus, the aesthetic dimension of digital extremism underscores that radicalisation transcends mere political persuasion; it encompasses atmosphere, performance, participation and emotional experience. The success of contemporary extremist movements can be attributed, in part, to their adept adaptation to the visually and emotionally driven culture of digital media.

Contemporary Patterns of Online Radicalisation

While extremism manifests diversely across political, cultural, and religious landscapes, it often exhibits analogous structural dynamics in the modern era of radicalisation. Central to this is the role of online extremism, which thrives within decentralised digital ecosystems characterised by emotionally charged storytelling, algorithm-driven amplification, and symbolic discourse, all underpinned by pervasive distrust of established institutions. The digital media landscape enables diverse ideological factions to co-opt comparable communicative tactics to heighten emotional involvement and foster social interaction.

Conspiracy movements illustrate the potency of digital radicalisation by condensing complex political realities into simplistic narratives focused on clandestine adversaries, covert manipulation, or institutional malfeasance. Such reductive explanations actively weaken the trust in journalism, scientific research, representative processes and

established expertise. These theories gain traction particularly during turbulent periods, offering emotionally gratifying interpretations of social crises or political upheaval.

The COVID-19 pandemic exemplified how digital radicalisation was exacerbated during a crisis. Heightened social isolation, pervasive uncertainty, and intensified online activity catalysed the rapid spread of misinformation and ideological polarisation. Extremist elements capitalised on these dynamics, framing public crises through narratives of fear, suspicion, and institutional betrayal. Pandemic-related conspiracy theories frequently intertwined with broader extremist ideologies, revealing the malleability of digital narratives in addressing contemporary anxieties.

Likewise, identity-based extremist factions exploit public fears about migration, demographic shifts, financial volatility and cultural change. These groups use emotionally charged imagery, chosen data and narratives of collective victimhood to heighten social anxieties and encourage animosity towards perceived outsiders. These movements often present themselves as strongholds of cultural, traditional or national identity facing existential threats.

Religious extremist entities have adeptly navigated digital media ecosystems, using recruitment videos, online sermons, encrypted communication channels, and transnational digital networks to transcend geographic constraints and directly engage susceptible audiences. Digital platforms enable the creation of emotionally immersive ideological environments that sustain cross-border allegiance.

The emergence of gender-based radicalisation is a noteworthy contemporary trend. Online communities built on resentment, misogyny, and hyper-masculine identity politics cultivate emotionally reinforcing environments that normalise hostility and exclusion. These communities illuminate how personal insecurities and emotional grievances are politicised within the digital sphere.

A critical development in recent times is the normalisation of extremist discourse through mainstream digital engagement. Ideas once confined to the social fringes may gradually gain legitimacy through mechanisms such as repetition, endorsement by prominent individuals, meme culture and algorithmic prioritisation. Extremist narratives increasingly coexist with mainstream political commentary, entertainment and social discourse, narrowing the gap between extreme beliefs and routine internet interactions.

The inherently decentralised nature of digital radicalisation complicates regulatory initiatives. Contemporary extremist movements often eschew formal hierarchy, opting for loosely networked online communities. Individuals connect with radical ideologies through accumulated exposure to narratives, symbols and emotional contexts, rather

than by explicit recruitment, rendering radicalisation a diffuse, fragmented and perpetually adaptive process.

Despite ideological divergence, contemporary extremist movements often deploy analogous strategies centred on emotional reinforcement, symbolic communication, identity formation and digitally mediated participation. The digital milieu inherently favours movements that prioritise emotional intensity, visibility and collective participation, providing fertile ground for the proliferation of extreme doctrines.

Countering Digital Radicalisation

Addressing digital radicalisation requires an interdisciplinary, multidimensional approach. Extremism emerges from an amalgamation of narrative construction, emotional conditions, technological ecosystems and socio-cultural milieus; therefore, depending exclusively on censorship or surveillance strategies is insufficient. Effective counter-radicalisation efforts must thoroughly understand the delicate interplay among media infrastructures, psychological susceptibilities, and the dissemination of ideological content.

Media literacy is a cornerstone strategy in the long-term fight against digital radicalisation. Empowering individuals to navigate online content critically involves recognising manipulation and understanding how algorithms shape information exposure. Educational institutions bear a significant responsibility for nurturing critical thinking, digital awareness, and responsible online interaction. Media literacy should go beyond simply identifying misinformation; it should encompass an understanding of emotional manipulation tactics, symbolic communication, and the complexities of algorithmic amplification. Advanced curricula might include modules on detecting algorithmic bias, decoding persuasive narrative structures, and practical exercises for identifying emotionally manipulative content or the rhetorical devices commonly used in extremist media. Programs such as Finland's national media education framework and UNESCO's media and information literacy initiatives have shown success in arming students and citizens with the analytical tools needed for the information age. Integrating these best practices or establishing cross-disciplinary collaborations with specialists in psychology, technology and political communication would ensure that media literacy education remains strong, adaptable and well-suited to counter the developing dynamics of online radicalisation.

In parallel, the governance of internet platforms plays a vital role. It is incumbent on technology companies to recognise that their suggestion and engagement-driven algorithms can amplify damaging content. Greater transparency into automated processes, the adoption of ethical moderation policies and robust accountability

frameworks are vital to reducing the visibility of extremist material. Furthermore, these platforms must formulate strategies to curtail the monetisation and proliferation of emotionally manipulative content.

Nevertheless, an overemphasis on punitive measures in counter-radicalisation initiatives can be counterproductive. Excessive reliance on censorship or surveillance can inadvertently reinforce narratives of victimhood and deepen institutional distrust. Extremist factions often portray themselves as oppressed, using censorship as corroboration of perceived institutional corruption or conspiratorial motives. Repressive measures, without careful consideration, risk exacerbating radicalisation rather than curbing it.

Promoting counter-narratives based on empathy, dialogue and inclusiveness is particularly vital. Creating alternative accounts that foster emotional inclusion and substantive participation without resorting to divisiveness or exclusion improves the discourse. Initiatives that support community engagement, intercultural dialogue, and inclusive public discourse can diminish the appeal of extreme beliefs by addressing individuals' fundamental emotional needs.

Furthermore, mental health and social support infrastructure is necessary for this strategy. Many individuals susceptible to radicalisation are drawn to extremist communities by isolation, alienation or emotional distress. Available mental health services, inclusive social environments and enduring community support structures can reduce the magnetic pull of radical narratives. Therefore, adequately addressing radicalisation requires a focus that goes beyond belief systems to include mental health and social connectivity.

Tackling digital radicalisation requires a concerted effort from researchers, educators, policymakers, psychologists and media practitioners. This issue transcends technology and is closely linked to broader social, emotional and governmental dynamics. An interdisciplinary understanding of these parts is crucial, as isolated technological solutions fall short.

Moreover, societies must confront the fact that digital radicalisation is inextricably tied to an extensive trust crisis in contemporary public life. Profound distrust of institutions, journalism, political entities and experts creates fertile ground for radical narratives. Therefore, rebuilding confidence through transparency, accountability and integrative governance is critical to mitigate ideological polarisation. Concrete measures could include establishing participatory governance models, in which citizens are actively involved in decision-making at the local and national levels. Regular public forums, citizen assemblies, and consultative councils can empower diverse communities to voice concerns and contribute to policy development. Additionally, candid communication from institutions is vital; publishing accessible reports on government

actions, decision rationales and results fosters clarity and honest engagement. The creation of autonomous monitoring agencies to oversee institutional practices can further reassure the public that ethical standards are upheld. Finally, strengthening media accountability, such as supporting public service journalism or encouraging fact-checking collaborations, can help rebuild trust in information sources. By prioritising these practical measures, societies can address the underlying trust crisis and establish a more resilient foundation against digital radicalisation.

Countering digital radicalisation ultimately requires a fine balance between ensuring security and defending democratic beliefs such as freedom of expression and free communication. Simplistic solutions do not capture the dynamic nature of extremism in the face of evolving technological and cultural landscapes. Long-term strategies, therefore, must focus on strengthening resilience, supporting critical awareness, providing emotional support and promoting inclusive participation within the digital cultural sphere.

Conclusion

The digital era has reconfigured radicalisation into a phenomenon deeply rooted in media and narrative dynamics. Fanatical ideologies, once propagated mainly through organised collectives and direct recruitment, now infiltrate everyday digital experiences shaped by algorithms, emotional narration, symbolic discourse, and virtual communities. In contemporary society, radicalisation is not simply facilitated by ideological indoctrination, but also by participatory engagement, identity construction and emotional immersion.

This chapter argues that narratives are necessary to understand modern extremism. Digital media amplify emotionally charged content, forming contexts in which ideological absolutes, symbolic affiliations and moral dichotomies become compelling. Extremist narratives distil complex situations into emotionally powerful accounts that offer consolation, recognition, and a sense of unity amid instability or insecurity. Radicalisation therefore evolves incrementally through sustained exposure to these accounts, shaping emotional perceptions and social identities.

Further analysis shows that psychological vulnerabilities—alienation, loneliness, uncertainty, identity disintegration and political mistrust—interact alongside digital infrastructures, increasing susceptibility to extreme doctrines. Online communities provide emotional affirmation and a sense of collective significance, making ideological constructs coherent and consoling during periods of social unease. Digital culture intensifies these emotional experiences through continuous interaction, algorithmic validation and participatory discourse.

Simultaneously, technology in isolation does not engender extremism. It is the confluence of media systems, social conditions, emotional drives and political apprehensions that catalyse radicalisation. Digital media serve as channels that increase and normalise extremist narratives; however, the attraction of these accounts is closely tied to wider societal experiences of insecurity and alienation in the modern milieu.

To understand digital radicalisation, one must move beyond reductive interpretations that focus exclusively on propaganda or individual psychopathology. Critical attention should be directed toward nuanced narratives, emotional ambiences and mediated identities that shape belonging, fear and perception in contemporary culture. As digital media continue to exert a deep impact on political and social spheres, confronting extremist narratives will remain a seminal challenge for democratic societies in the twenty-first century.

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Chapter 30 : Digital Pedagogy And Student Engagement In Higher Education: Bridging The Gap Between Traditional And Online Learning Environments

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Abstract

Higher education has changed as a result of the quick adoption of digital technology, posing both new possibilities and difficulties for raising student participation. The purpose of this study is to investigate how digital pedagogy affects student participation in traditional, online, and hybrid learning settings. Using a conceptual and review-based methodology, the study draws from known theoretical frameworks, especially the multidimensional model of engagement with behavioural, emotional, and cognitive dimensions, and synthesizes contemporary literature (2020–2025). The examination focuses on how student involvement and learning experiences are shaped by digital pedagogical methods, such as the usage of learning management systems, interactive platforms, and collaborative tools. The results show that, although its efficacy varies depending on the learning environment, digital pedagogy has a substantial impact on all three aspects of student involvement. While online contexts encourage flexibility and cognitive engagement through self-regulated learning, traditional settings strengthen emotional and social contact. By combining the advantages of both approaches, blended learning turns out to be the most successful strategy. The study also finds important influencing factors that regulate involvement in digital contexts: learner-related (motivation, self-regulation, digital literacy), technological (accessibility, connectivity, platform usability), and psychological (digital stress, well-being). The study suggests an integrated conceptual framework that connects digital pedagogy with learning outcomes and student engagement in higher education based on these findings. According to the study's findings, successful digital pedagogy necessitates not just the integration of technology but also learner-centered, pedagogically sound approaches backed by sufficient infrastructure and consideration for the psychological requirements of students. The

results provide educators and policymakers with useful recommendations for creating inclusive, interesting, and productive digital learning environments.

Keywords: Digital Pedagogy, Student Engagement, Online Learning, Self-Regulation, Higher Education.

1.Introduction

Higher education has seen a dramatic change due to the rapid advancement of digital technologies, which have redefined conventional teaching and learning methods and opened up new avenues for student involvement. The intentional use of digital technologies to enhance instruction and learning is referred as digital pedagogy, and it has become a key component of modern educational methods. Due to the COVID-19 pandemic, educational institutions worldwide were obliged to transition from traditional classroom instruction to online and hybrid learning environments, which hastened the change and brought attention to the advantages and disadvantages of digital education (Dhawan, 2020). It is often acknowledged as a key factor in determining academic performance and retention in higher education is student engagement, a multifaceted concept that includes Cognitive, emotional, and behavioural engagement in educational activities (Fredricks, Blumenfeld, & Paris, 2004). Engagement becomes even more important in digitally mediated classrooms since students' motivation, participation, and sense of belonging may be impacted by the lack of face-to-face interaction. As a result, one of the main areas of study in educational research is how digital pedagogy affects student involvement. Flexible, individualized, and cooperative learning opportunities are provided by digital learning environments, which are backed by resources like Interactive platforms, virtual classrooms, and learning management systems (LMS). According to studies, these technologies can improve student engagement by encouraging peer interaction, active learning, and instant feedback (Bond et al., 2020). However, the efficiency of digital pedagogy varies and is influenced by a number of psychological and contextual factors. Meaningful involvement may be hampered by problems including digital tiredness, restricted access to technology resources, low digital literacy, and diminished social presence (Adedoyin & Soykan, 2020).

Additionally, students' participation in online learning settings is greatly influenced by psychological concepts like motivation, self-regulation, and digital stress. While students who experience high levels of stress or low motivation may disengage, self-regulated learners are more likely to create objectives, manage their time, and stay actively involved in digital contexts (Zimmerman, 2002). These elements highlight the necessity of instructional approaches that meet the cognitive and emotional demands of students in addition to integrating technology. There is still a

glaring gap in the integration of traditional and digital pedagogical approaches to develop a thorough framework for student participation, despite the expanding corpus of literature on digital learning. Without providing a comprehensive viewpoint that connects various learning settings, a large portion of the current research concentrates either on technology tools or on discrete factors of engagement. As a result, there is an urgent need to summarize current research and suggest methodical strategies that improve participation in a variety of educational contexts.

In order to investigate how digital pedagogy affects student involvement in higher education, the current study uses a conceptual and review-based methodology. The study intends to uncover important aspects impacting engagement and to suggest a holistic framework that incorporates successful digital teaching practices by examining theoretical frameworks and empirical findings. Additionally, the study aims to offer educators and legislators useful recommendations for enhancing the efficacy, inclusivity, and quality of higher education in the digital era.

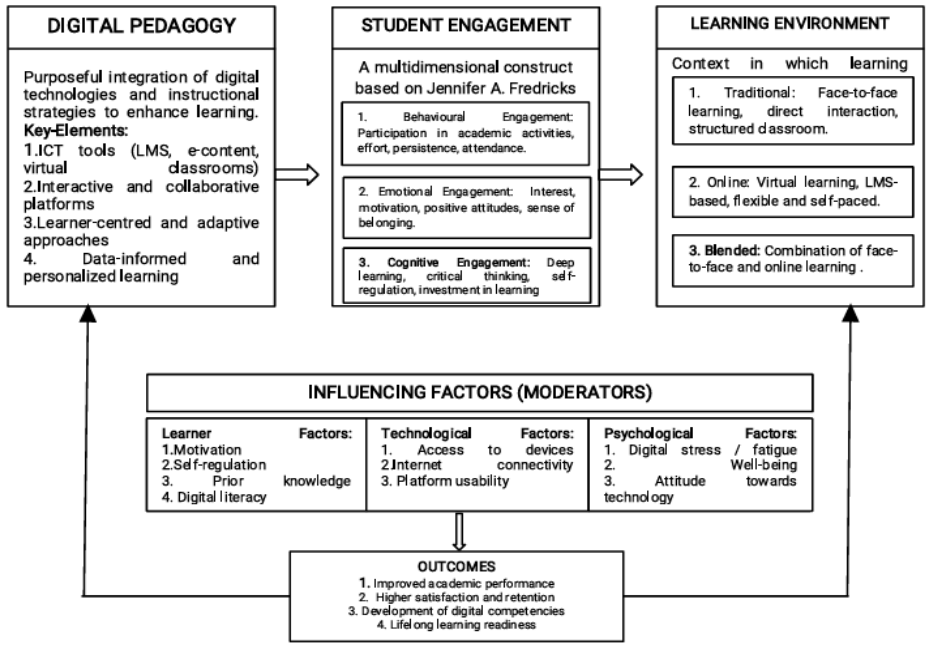
2. Objectives Of The Study

The present study aims to explore the role of digital pedagogy in raising the level of student participation in higher education .The specific objectives are:

1. To examine how digital pedagogy affects students behavioural, emotional, and cognitive engagement in traditional, online, and hybrid learning settings in higher education.
2. To create a thorough conceptual framework that incorporates learning environments, digital pedagogy, and important aspects (technological, psychological, and learner-related) that affect student engagement.

3. Conceptual Framework Of Digital Pedagogy And Student Engagement

In order to explain the connection between digital pedagogy and student involvement in higher education, the current study offers a conceptual framework. The framework incorporates important components including learning settings and influencing factors by drawing on well-established viewpoints, such as Jennifer A. Fredricks' multidimensional view of engagement. It seeks to offer a systematic understanding of how students' behavioural, emotional, and cognitive engagement in and hybrid learning environments are influenced by digital teaching approaches.



"Figure 1: Conceptual Model of Digital Pedagogy and Student Engagement"

"Source: Developed by the Author's"

The conceptual framework that shows the connection between digital pedagogy and student involvement in higher education is shown in Figure 1. The primary influential factor in this concept is digital pedagogy, which integrates learner-centered methodologies and digital resources to shape teaching-learning processes. Its effects are investigated in traditional, online, and hybrid learning contexts, which offer the contextual settings where engagement takes place. According to the paradigm, student engagement is a multifaceted term with behavioural, emotional, and cognitive components. By encouraging active engagement, fostering critical thinking and self-control, and influencing students' motivation and sense of community, digital pedagogy affects these characteristics. Three types of factors moderate the relationship between digital pedagogy and student engagement: learner-related factors (motivation, self-regulation, digital literacy), technological factors (access, connectivity, platform usability), and psychological factors (digital stress, well-being, attitudes). The efficacy of digital learning experiences is determined by these characteristics. Key learning outcomes, such as enhanced academic achievement, increased satisfaction, and the development of digital capabilities, result from the interaction of these elements. As a result, the framework satisfies Objective 2 by offering an integrated model that connects all important factors and supports Objective 1 by elucidating how digital pedagogy affects engagement across learning environments.

4. Theoretical Framework

The current study explains how digital pedagogy affects student involvement in higher education and is based on well-established learning theories. These theories offer a logical basis for comprehending how learning environments, instructional strategies, and student outcomes interact in digitally mediated contexts.

Constructivist Learning Theory, which is primarily associated with scholars like **Jean Piaget** and **Lev Vygotsky**, kids actively generate knowledge via interaction and experience. This perspective strongly emphasizes learner-centered approaches, where knowledge is acquired through collaboration, research, and social contact. Constructivist concepts are represented in the usage of interactive platforms, discussion boards, and collaborative tools that encourage deeper learning and active participation in the context of digital pedagogy.

In addition, **Barry J. Zimmerman's, Self-Regulated Learning Theory** emphasizes how students can control their own learning. It highlights abilities including self-evaluation, self-monitoring, and goal-setting. In online and mixed learning settings, where students must assume more responsibility for their education, this notion is especially pertinent. Self-regulation and the cognitive aspect of student involvement are closely related since students who actively manage their education exhibit greater levels of perseverance and academic success.

Additionally, The Community of Inquiry Framework by **D. Randy Garrison, Terry Anderson,** and **Walter Archer** offers a thorough framework for comprehending learning in virtual settings. Three fundamental components are identified: teaching presence, social presence, and cognitive presence. Together, these components promote significant learning opportunities and strongly correspond with the multifaceted character of student interaction.

Furthermore, according to **Jennifer A. Fredricks** and associates, the notion of student engagement encompasses behavioral, emotional, and cognitive aspects. This framework offers an organized perspective for examining how students engage in and react to educational activities in various contexts.

Overall, by elucidating how digital pedagogy, when successfully applied, improves student engagement through active involvement, self-regulation, and meaningful interaction, these theoretical stances jointly support the suggested conceptual framework. The development of successful digital instructional strategies is supported by this comprehensive theoretical foundation, which also enhances knowledge of teaching-learning processes in higher education.

5. Literature Review

With an emphasis on studies released between 2020 and 2025, the current section examines recent academic research on digital pedagogy and student participation in higher education. According to Jennifer A. Fredricks, the literature emphasizes the increasing importance of technology-enhanced learning settings and their effects on behavioural, emotional, and cognitive engagement. It also looks at important topics such new digital innovations, the influence of psychological and technological elements, and online and hybrid learning. The topic, key findings, and implications of pertinent studies are summarized in the following table, which provides an organized summary of those investigations.

Author(s) & Year	Focus of Study	Key Findings	Relevance to Present Study
Adedoyin & Soykan (2020)	Online learning during COVID-19	Identified challenges such as digital divide, limited access, and reduced interaction affecting engagement	Highlights importance of technological and contextual factors
Bond et al. (2020)	Student engagement in online learning	Engagement is multidimensional; pedagogy plays a crucial role over mere technology use	Supports behavioural, emotional, and cognitive engagement dimensions
Nkomo, Daniel & Butson (2021)	Digital technologies and engagement	LMS and digital tools enhance participation; lack of clarity in measuring engagement	Justifies need for structured conceptual framework
Kahu & Nelson (2022)	Student engagement framework	Emphasized interaction between institutional and personal factors influencing engagement	Supports integration of learner and contextual variables
Zawacki-Richter et al. (2023)	Digital and AI in higher education	Technology enhances learning but requires pedagogical alignment for effectiveness	Reinforces importance of pedagogy in digital environments
Dwivedi et al. (2023)	AI adoption in education	AI improves personalization but raises ethical and accessibility concerns	Adds emerging technological dimension to framework
Dichev & Dicheva (2024)	Gamification in education	Gamified learning increases motivation, participation, and engagement	Supports use of innovative digital strategies
Roul & Mohalik (2025)	Engagement in digital platforms	Engagement influenced by motivation, self-regulation, and external factors	Justifies inclusion of psychological and learner factors

"**Table 1**: Summary on Review Studies on Digital Learning, Student Engagement and Educational Technologies"

"**Source:** Author's Compilation"

The above mentioned research shows that digital pedagogy and its effect on student engagement are becoming increasingly important. Recent research emphasizes the significance of sophisticated technologies and psychological aspects, whereas previous studies concentrated on difficulties and transition issues. An integrated paradigm that links digital pedagogy, engagement dimensions, and learning environments is still required, though.

6. Research Gap

Even while there is an increasing amount of research on digital pedagogy and student engagement, most of it focuses on these concepts alone or in particular online learning environments. According to Jennifer A. Fredricks, many research focus on technology or instructional tactics but lack an integrated viewpoint that links pedagogical practices with behavioural, emotional, and cognitive elements of involvement. Additionally, the combined impact of learner-related, technological, and psychological aspects in traditional, online, and hybrid learning contexts has received little consideration. Additionally, there are few conceptual frameworks in higher education that provide a comprehensive explanation of these relationships. Thus, by putting forth a thorough framework that connects digital pedagogy with multifaceted student participation, the goal of the current work is to bridge this gap.

7. Methodology

The current study investigates the connection between digital pedagogy and student involvement in higher education using a conceptual and systematic review-based methodology. The study develops an integrated and theoretically informed conceptual framework by synthesizing existing literature rather than gathering primary data.

7.1 Data Sources and Search Methods

To ensure authenticity and intellectual rigor, pertinent material was methodically acquired from respectable and excellent academic databases, such as Scopus, Web of Science, ERIC, and Google Scholar. Terms including digital pedagogy, student involvement, online learning, blended learning, self-regulated learning, and higher education were used in an organized keyword search strategy. In order to incorporate current advancements, especially in the post-COVID digital learning setting, the evaluation was restricted to publications from 2020 to 2025.

7.2 Criteria for Inclusion and Exclusion

Studies were chosen in order to guarantee conceptual clarity and relevance if they:
(i) explored student involvement or its behavioural, emotional, or cognitive aspects; **(ii)** concentrated on digital pedagogy or technology-enhanced learning in higher education; and **(iii)** were published in peer-reviewed journals or scholarly sources in English. Research was excluded if it: **(i)** Only addressed instruction at the school level, **(ii)** had no direct bearing on student involvement, or **(iii)** fell short of academic quality requirements. Only pertinent, excellent, and context-specific papers were used to inform the analysis thanks to this selection method.

7.3 Review and Data Analysis Method

The chosen literature was methodically reviewed by the study using a thematic analysis methodology. Key themes from several studies were found, contrasted, and summarized, with an emphasis on: **(i)** student engagement aspects; **(ii)** digital pedagogical approaches; **(iii)** traditional, online, and hybrid learning settings; and **(iv)** influencing elements (technological, psychological, and learner-related). This approach made it possible to combine various discoveries into a logical and analytically organized comprehension of the subject.

7.4 Conceptual Framework Development

A thorough conceptual framework was created based on the thematic synthesis of theoretical and empirical research. The framework outlines how learning outcomes in higher education are influenced by digital pedagogy, learning environments, student involvement, and moderating factors.

8. Analysis And Discussion

According to a review of recent research, digital pedagogy is crucial in determining how engaged students are in higher education, especially in online and mixed learning settings. The abrupt shift to digital learning has highlighted the significance of pedagogically sound technology integration rather than merely technological adoption, according to studies like Adedoyin and Soykan (2020) and Bond et al. (2020).

The multifaceted character of student involvement, which includes behavioral, emotional, and cognitive components as defined by Jennifer A. Fredricks, is a crucial finding across studies. Digital platforms improve behavioral engagement through active participation and interaction, according to research by Bond et al. (2020) and

Kahu and Nelson (2022). However, social presence and interaction have an impact on emotional involvement and may be diminished in entirely online environments (Adedoyin & Soykan, 2020). According to Nkomo, Daniel, and Butson (2021), self-paced learning and critical thinking chances greatly enhance cognitive engagement in digital contexts. When learning environments are compared, significant variations in engagement patterns become apparent. Conventional classrooms encourage face-to-face communication and quick response, which strengthens social and emotional involvement. Online settings, on the other hand, offer flexibility and autonomy, which improves cognitive engagement but may lessen interpersonal connection. According to research by Zawacki-Richter et al. (2023), blended learning environments improve overall engagement levels by combining the advantages of both modalities, providing a balanced approach.

The data also shows how moderating factors influence student engagement. Particularly in digital contexts, learner-related elements like motivation and self-control are critical predictors of engagement (Roul & Mohalik, 2025). Participation and learning continuity are greatly impacted by technological elements, such as device access and internet availability (Adedoyin & Soykan, 2020). Additionally, psychological issues like stress and digital fatigue have become significant obstacles to maintaining attention, particularly in situations involving extended online learning. Another crucial realization is that instructional design, not just technology, is what makes digital pedagogy effective. According to research by Dichev and Dicheva (2024), tactics like gamification and interactive learning greatly increase student engagement and motivation. Similar to this, Dwivedi et al. (2023) emphasize the promise of cutting-edge technology, such as artificial intelligence, in enhancing engagement and personalizing learning experiences, but they also issue a warning regarding accessibility and ethical issues. The suggested conceptual framework, which views digital pedagogy as a key element impacting student engagement in traditional, online, and hybrid learning environments, is highly supported by the synthesis of these findings. Learning outcomes, including academic achievement, satisfaction, and the development of digital capabilities, are ultimately determined by the interplay of educational approaches with learner, technological, and psychological elements.

Overall, the discussion emphasizes that successful digital pedagogy necessitates a comprehensive and well-rounded strategy that combines technology with sensible teaching techniques and sufficient student support. Therefore, in order to optimize student participation, higher education institutions must concentrate not just on digital infrastructure but also on creating inclusive, stimulating, and psychologically supporting learning environments.

9. Findings Of The Study

The findings of the present study are presented in alignment with the stated objectives to ensure clarity and coherence between the purpose of the study and its outcomes.

1. **To examine how digital pedagogy affects students behavioural, emotional, and cognitive engagement in traditional, online, and hybrid learning settings in higher education.**

According to the study, all three aspects of student engagement are significantly impacted by digital pedagogy. Active participation, made possible by digital tools like learning management systems and interactive platforms, improves behavioral engagement. Opportunities for self-regulated learning, critical thinking, and flexible learning paths enhance cognitive engagement in online and mixed learning environments. However, because of direct interaction, instant feedback, and a deeper sense of belonging, emotional involvement is somewhat stronger in conventional face-to-face settings. Blended learning is found to be the most successful of the three learning environments since it combines the benefits of both traditional and online forms, increasing overall student engagement.

2. **To create a thorough conceptual framework that incorporates learning environments, digital pedagogy, and important aspects (technological, psychological, and learner-related) that affect student engagement.**

According to the study, a number of interconnected elements affect students' involvement in digital learning environments. Engagement levels are mostly determined by learner-related factors like motivation, self-regulation, prior knowledge, and digital literacy. Access to digital devices, internet connectivity, and platform usability are examples of technological elements that have a big impact on learning continuity and participation. Digital stress, weariness, wellbeing, and attitudes toward technology are examples of psychological variables that serve as significant moderators that can either promote or impede involvement. Based on the results, the study effectively creates a thorough conceptual framework in which digital pedagogy serves as the primary influencing factor. It interacts with various learning environments and moderating factors to shape behavioural, emotional, and cognitive engagement, ultimately improving academic outcomes, student satisfaction, and the development of digital competencies.

10. Limitations Of The Study

The current study has some limitations even if it provides insightful information on the connection between digital pedagogy and student involvement. First, the suggested framework is not empirically tested because the study is conceptual

and review-based, depending only on secondary data. Second, the material reviewed is limited to the years 2020–2025, which guarantees recentness but may leave out earlier fundamental contributions. Third, the study does not take into consideration differences between other subjects, institutions, or cultural contexts because it mainly concentrates on higher education situations. Selection bias may also be introduced because the results are dependent on the caliber and scope of the chosen studies. Future studies should use more comprehensive contextual analysis and empirical validation to solve these shortcomings.

11. Implications Of The Study

The current study's conclusions have significant ramifications for future higher education research, institutional policies, and instructional strategies. These ramifications highlight the necessity of integrating digital pedagogy in a balanced way to improve student engagement in a variety of learning settings.

11.1 Pedagogical Implications

The study emphasizes that learner-cantered instructional design should be the main focus of effective digital pedagogy, rather than just using technology. To improve behavioural and cognitive engagement, educators should use interactive techniques including problem-based learning, discussion boards, and collaborative learning. Furthermore, as Jennifer A. Fredricks' multidimensional framework emphasizes, it is crucial to promote emotional involvement through prompt feedback, social contact, and supportive learning environments. By promoting goal-setting, introspection, and active engagement in digital environments, educators can also support self-regulated learning.

11.2 Institutional and Policy Implications

Higher education institutions must have enough technology infrastructures, including digital platforms, a stable internet connection, and technical support systems. By encouraging accessibility and inclusivity, policies should concentrate on closing the digital gap. In order to give teachers the digital capabilities and pedagogical skills required for successful online and blended learning, educational institutions should also fund faculty training and professional development initiatives. To enhance overall learning results, digital pedagogy integration should be in line with curriculum design and quality assurance procedures.

11.3 Technological Implications

According to the report, implementing cutting-edge technology like AI-based tools and adaptive learning systems can improve student engagement and customisation. However, careful implementation of these technologies is necessary to ensure ethical considerations, usability, and accessibility. Learner engagement and performance can be greatly increased by using user-friendly platforms and data-driven teaching strategies.

11.4 Psychological and Learner-Cantered Implications

The results emphasize how critical it is to address psychological issues including motivation, weariness, and digital stress. Through flexible learning schedules, a balanced workload, and engagement-boosting activities, educational institutions and educators should establish supportive learning environments that foster students' well-being. Emotional engagement in digital environments can be further strengthened by promoting peer contact and a sense of community.

11.5 Research Implications

By putting out an integrated conceptual framework that connects digital education and student participation, the study lays the groundwork for further research. This approach may be empirically tested in other academic fields and educational settings in the future. In terms of student involvement, there is also room to investigate cutting-edge fields like artificial intelligence, learning analytics, and hybrid learning models.

12. Conclusion

The current study emphasizes how digital pedagogy may significantly improve student participation in higher education. The study shows that successful digital technology integration can have a major impact on the cognitive, emotional, and behavioural facets of engagement as defined by Jennifer A. Fredricks. It does this by drawing on theoretical viewpoints and current literature. The results, however, also highlight the fact that technology is not enough on its own; effective pedagogical design and meaningful learner interaction are critical to the success of digital learning.

Each mode has unique benefits and drawbacks, according to a comparison of traditional, online, and hybrid learning environments. Online venues offer flexibility and promote self-regulated learning, while conventional settings encourage direct engagement and emotional connection. In order to maximize student engagement, blended learning appears as a well-rounded strategy that combines the advantages of both. The creation of a thorough conceptual framework that incorporates digital

pedagogy, student participation, learning settings, and moderating elements including learner characteristics, technological access, and psychological conditions is one of the study's main contributions. This paradigm offers a comprehensive grasp of how to improve participation in a variety of educational settings.

The study concludes that that optimizing the potential of digital pedagogy requires a comprehensive and learner-cantered strategy. Institutions of higher learning must prioritize student welfare, faculty readiness, pedagogical innovation, and technology infrastructure. To improve engagement and learning results in higher education, future studies should investigate new digital trends and empirically validate the suggested framework.

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Chapter 31 : Bridging Comprehension and Critique: Exploring EFL Students' Perspectives on the Critical Reading Module in Moroccan ESEF: Berrechid and Beni Mellal as a Case Study

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Abstract

This study investigates the attitudes of ESEF (Écoles Supérieures de Éducation et de la Formation) students toward critical reading module across two Moroccan higher education institutions. Utilizing a quantitative approach, data were collected from 306 participants at the Berrechid and Beni Mellal institutions through an online questionnaire measuring perceived benefits, challenges, and the impact of gender. The findings demonstrate that most ESEF students hold positive views of the module, noting improvements in analytical skills, confidence, and academic engagement. While challenges such as reading difficulty and workload were reported, these factors did not substantially affect the overall favorable perceptions. Inferential analysis identified no significant differences in attitudes between male and female students, indicating a similar experience across gender groups. The results underscore the module's effectiveness in fostering critical academic skills and highlight its inclusive character. These findings offer valuable insights for curriculum designers and educators aiming to enhance critical reading instruction and support equitable learning opportunities for diverse EFL student populations.

Keywords: Attitudes, Critical Reading, EFL students, ESEF, Gender, Higher Education

1. Introduction

In many EFL classrooms, reading focuses on comprehension: identifying main ideas, retrieving information, and understanding text (Maimoune, 2023). In university, students must analyze how texts work, question assumptions and claims, spot gaps, and respond independently. This shift from comprehension to evaluation is crucial for academic literacy, making critical reading vital in higher education—not just an added skill, but core intellectual work (Hamdi, 2023; Wallace, 2003).

Yet, the critical reading module's place in the curriculum reveals little about student experience. Policy justification doesn't guarantee classroom accessibility or engagement. Critical reading expects students to question texts, suspend instant agreement, and focus on evidence and implication—often new challenges. Recognizing its value isn't enough for confidence. Attitude shapes motivation, persistence, and willingness to engage when academic work gets tough (Alsaeedi et al., 2021).

This is especially relevant in students' early university years. The transition is rarely smooth; they face heavier reading loads, less guidance, and greater independence than in school. Critical reading can help build academic habits, but it can also highlight gaps in preparation. Research shows academic adjustment is key when reading and self-regulation are demanding (Baghit et al.,2024b; Van Rooij et al., 2018). Critical reading is not just about content; it is part of becoming a university student.

In the Moroccan EFL context, this is especially relevant. Critical reading is tied to aims such as analytical thinking, maturity, and autonomy—highly valued at university. Achieving these aims is harder than affirming them. Students enter university with unequal reading backgrounds, confidence, and exposure to analysis in English. Thus, experiences with the module differ: some find it empowering, others see it as abstract or disconnected. Examining student attitudes reveals how the module is experienced rather than just described (Baghit el al., 2024a).

This study examines EFL students' attitudes toward the critical reading module in two different institutions: ESEF Berrechid and Beni Mellal (Baghit & Touhami, 2026). The chosen sites allow comparison within a similar context. The study does not assume the module's value or celebrate its curricular presence, but asks: how do students evaluate the module, and do responses show enthusiasm, uncertainty, or mixed views? This question is pedagogically important. Curricular debates focus on objectives and content, often overlooking student experience. A module may look coherent on paper but lack engagement if students find it inaccessible or detached. Attitudes reveal practical course life: how learners understand, resist, or appreciate it.

Recent research shows students value critical reading, but face challenges with interpretation, complexity, and critique (Julianti et al., 2024). Research links perceptions to persistence, interest, and effort (Alsaeedi et al., 2021).

Gender deserves attention, but not in an essentialist way. The goal is to determine whether students' attitudes toward the module differ. Some research finds gender differences in reading attitudes and strategies, but patterns vary (Logan & Johnston, 2009; Rianto, 2021). In critical reading, where confidence and judgment are central, any differences (or lack thereof) are worth noting. That being said, the present study is guided by the following research questions:

1. What perceived benefits do ESEF EFL students feel they obtained from their experience with the critical reading module?
2. What challenges do ESEF EFL students perceive in relation to the critical reading module?
3. Is there any significant difference between male and female ESEF EFL students' perceptions of the critical reading module?
4. Does gender affect students' perceptions of the critical reading module?

These questions, though modest, address whether the module is experienced as meaningful, manageable, and relevant. The study proceeds from the premise that the curricular value of critical reading extends beyond stated syllabus goals and must be evaluated through students' experiences. If students perceive the module as intimidating or disconnected, its significance is diminished. By examining attitudes across three institutions and considering the role of gender, the present research offers a grounded account of critical reading in Moroccan EFL higher education. With this focus established, the following literature review situates the study within broader scholarly discussions of critical reading, student attitudes, and the influence of gender in language-learning contexts.

2. Literature Review

2.1 The Role of Critical Reading in Language Learning

Critical reading draws from the tradition of critical thinking; a concept rooted in Dewey's (1933) advocacy for active learning. Freire (1978) extended this by opposing passive transmission of knowledge and emphasizing the cultivation of critical consciousness, whereby learners engage with and interrogate the world through texts. Davies and Barnett (2015) synthesized these foundational views into a theoretical framework that integrates not only the acquisition of cognitive skills but also the fostering of critical dispositions and ethical engagement. In this study, these combined theoretical perspectives form the explicit framework for analyzing EFL students' attitudes toward the critical reading module. The research specifically positions the investigation within this framework to clarify how critical reading pedagogy in higher

education should develop both students' analytical skills and their broader dispositions toward critical engagement.

Critical reading emerges as an application of critical pedagogy to language learning. Wallace (2003) links critical reading to practical language education, a connection that is particularly significant in EFL contexts such as Morocco, where aligning classroom practices with real academic needs is crucial for student development. In a similar vein, Wilson (2016) uses Davies and Barnett's (2015) concept of "critical dispositions" to argue that reading fosters questioning, evaluation, and meaning-making beyond language proficiency—a perspective that underscores the importance of cultivating these skills in Moroccan EFL higher education, where students' ability to engage critically with texts supports not only language acquisition but also broader academic literacy (Touhami & Baghit, 2026).

Collins (2022) supported Wilson's view on English for Academic Purposes (hereafter EAP) writing, finding that designed tasks and teacher interactions foster critical dispositions. Bakhtiari Moghadam et al. (2023) showed that integrating critical thinking into reading improves comprehension and critical skills, demonstrating the pedagogy's impact. Le et al. (2022), after reviewing decades of research, found critical reading less studied than critical thinking—highlighting a gap this research addresses.

2.2 Previous Research on Student Attitudes toward Critical Reading

Although there is increasing attention to critical thinking in reading as a skill, a critical review of the literature reveals that its pedagogical impact is often constrained in practice. He and AlSaqqaf (2025) found only moderate engagement with critical reading among both teachers and students, despite broad recognition of its value. Critically, this finding depends largely on self-reported attitudes and therefore may not capture the full complexity or nuance of classroom realities. Similarly, Le et al. (2024) observed that even when critical reading activities are implemented, students tend to use lower-level strategies such as recall and comprehension, positioned at the base of Bloom's Taxonomy. Their findings, however, are based on the frequency of strategy use rather than on detailed observation of classroom interactions, which restricts insight into the actual depth of instructional practice. Taken together, these studies illuminate a consistent gap between the aspirational aims of critical reading instruction and its practical enactment, particularly in relation to higher-order skills like evaluation and synthesis. Nevertheless, the generalizability of these conclusions to other EFL contexts remains uncertain, given variations in research methodology and the possible influence of cultural factors. This ongoing uncertainty justifies the empirical focus of the present study, while the results in Table 2 quantitatively summarize patterns of strategy use and engagement specific to the context investigated.

On the other hand, Bakhtiari Moghadam et al. (2023) concluded that attitudes toward critical reading improve when the classroom environment is conducive to engagement. Participants in the study were assigned to two groups: one received structured critical thinking instruction, while the other received conventional teaching. Students who followed an intervention that used Bloom's taxonomy across the three stages of exposure, exploration, and evaluation demonstrated more positive attitudes toward the learning climate. Bakhtiari Moghadam et al.'s (2023) findings showed that students receiving the intervention became more reflective and more willing to consider different viewpoints, whereas the control group did not show any comparable or significant change. Notably missing in the studies covered above is systematic attention to how gender, as a variable, shapes students' engagement with or perception of critical reading activities.

2.3 Studies Examining Gender and Attitudes Toward Critical Reading

Surveying the literature of critical reading in English language education yields scarce findings. Rianto (2021) distinguishes itself as one of the few studies to highlight how gender shapes male and female EFL students' engagement with reading tasks differently. The study found that female EFL students outperform their male counterparts in the use of higher-level metacognitive reading strategies. Despite its small size, the difference is still statistically significant. The study also found that the gender gap is more pronounced among less-skilled readers and diminishes among more skilled readers, suggesting that proficiency affects the gender gap. It is worth noting that while Bakhtiari Moghadam et al. (2023) and He and AlSaqqaf (2025) both addressed gender in their studies, they did not treat it as a variable affecting male and female students' attitudes toward critical reading instruction. Gender is used simply as a sample in Bakhtiari Moghadam et al., and it appears as demographic data in He and AlSaqqaf (2025). These omissions of gender as a variable shaping attitudes toward critical reading in English language education hint at a gap that this study directly addresses.

3. Research Method

3.1 Instruments

The present research adopted an online questionnaire consisting of 14 items designed to gather three types of information: (1) demographic data, (2) perceptions of the benefits of the critical reading module (items 1–7), and (3) perceptions of the challenges of the critical reading module (items 8–14). The rationale for employing an online questionnaire was threefold: it enabled efficient data collection across multiple institutions, facilitated participation from a geographically dispersed student population, and ensured greater accessibility and convenience for respondents. To ensure reliability, a pilot study was conducted with 10 randomly chosen students from the sample, yielding a Cronbach's alpha of .90 (see Table 1).

Table 1
Reliability Statistics of the Latent Constructs

Cronbach Alpha	N of Items
.90	14

The finalized questionnaire, containing 14 closed-ended questions, was distributed to participants via Google Forms. Prior to participation, all students were provided with an informed consent form clearly outlining the purpose of the study, the voluntary nature of participation, and assurances of confidentiality and anonymity. No personally identifying information was collected, and participants retained the right to withdraw from the study at any stage. However, beyond inherent limitations of self-reported data via online questionnaires—such as the potential for social desirability bias and varying interpretations of items—it should be noted that sampling was limited to students enrolled in ESEF institutions only and was based on voluntary responses. This restriction not only limits the generalizability of the findings to the broader Moroccan higher education context but may also result in response bias, as participants with particularly strong or weak opinions may have been more likely to respond. For data analysis, responses were coded numerically, and descriptive statistics (means, standard deviations, and percentages) were calculated to summarize response patterns. Independent-samples t-tests were then used to determine whether any differences in perceptions between male and female students were statistically significant.

Closed-ended questions were chosen for their effectiveness in eliciting responses related to categorical or quantitative variables and for their suitability in capturing perceptions or attitude-based data (Kothari, 2004). Participants were asked to rate their perceptions of the critical reading module using a 5-point Likert scale ('Strongly Disagree' to 'Strongly Agree'). While closed-ended formats enhance standardization and facilitate quantitative analysis, they may also introduce response biases, such as social desirability or acquiescence bias, which can affect the accuracy of self-reported attitudes.

This study employed a quantitative research design integrating both descriptive and inferential statistical approaches. The descriptive phase summarized participants' responses using percentages, means, and standard deviations to provide a clear overview of general trends in EFL students' attitudes toward the critical reading module. The inferential phase involved statistical hypothesis testing to determine

whether observed differences in attitudes between groups—specifically by gender—were statistically significant.

4. Results

A total of 306 ESEF EFL students participated in the study, with 65 (21.2%) male and 241 (78.8%) female respondents (see Table 2). The analysis of the first research question, which addressed perceived benefits, yielded findings summarized in Table 1 and indicated an overall positive student response. Most participants held favorable opinions about the critical reading module and highlighted several key advantages. Specifically, Table 3 shows that 72% of students agreed or strongly agreed that the module enhanced their ability to analyze texts, with a mean score of 4.1 (SD = .7) on a 5-point scale. This mean indicates that, on average, students rated their agreement above the neutral midpoint, suggesting a substantial perceived benefit. Additionally, 69% reported that their confidence in expressing opinions increased as a result of the module (M = 4.0, SD = .8), while 65% stated that it heightened their interest in academic reading. Notably, 78% of respondents viewed the skills gained as relevant and applicable to other courses, and the high mean score for identifying arguments and evidence (M = 4.2, SD = .6) reinforces the effectiveness of the module in promoting these skills. Overall, these descriptive statistics indicate that the majority of ESEF students found the critical reading module beneficial, both in terms of skill development and broader academic engagement.

While students recognized these clear benefits, some challenges were also reported, but with less intensity overall. A little over half (54%) found some assigned readings too difficult (M = 3.3, SD = 1.0), and 49% struggled with the workload (M = 3.2, SD = .9)—yet these mean scores remain close to the scale midpoint, indicating that major difficulties were not the norm. Difficulty understanding certain concepts was reported by 41%, and 46% noted time management as a concern (M = 3.1, SD = 1.0). Neutral or mixed responses about unclear instructions and limited resources suggest that, for most students, these were not persistent barriers.

Table 2

Demographic Characteristics of the Study Population

Note. n = number of participants.

Institution	Total Participants	Male (n)	Female (n)	Age Range (Years)
ESEF Berrechid	94	23	71	19–20
ESEF Beni Mellal	212	42	170	19–20
Total	**306**	**65**	**241**	**19–20**

Table 3

Descriptive Results of Students' Perceived Benefits and Challenges of the Critical Reading Module (N = 306)

Variable	Agree/Strongly Agree (%)	M	SD
Perceived Benefits			
Improved ability to analyze texts	72	4.1	0.7
Increased confidence in expressing opinions	69	4.0	0.8
Increased interest in academic reading	65	—	—
Skills relevant to other courses	78	—	—
Improved ability to identify arguments and evidence	—	4.2	0.6
Perceived Challenges			
Assigned readings were too difficult	54	3.3	1.0
Struggled with workload	49	3.2	0.9
Difficulty understanding certain concepts	41	—	—
Time management difficulties	46	3.1	1.0
Unclear instructions	Neutral/Mixed	—	—
Limited learning resources	Neutral/Mixed	—	—

Note. M = mean; SD = standard deviation. Responses were measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Dashes indicate that specific descriptive statistics were not reported.

Based on the inferential statistical analysis reported in the document, there is no significant difference between male and female ESEF EFL students' perceptions of the critical reading module. While descriptive statistics indicated that female students were slightly more likely to report positive attitudes, and male students reported more challenges, the independent-samples *t*-tests revealed that these differences were not statistically significant.

This means that, in terms of perceived benefits and challenges related to the critical reading module, gender did not significantly shape students' attitudes. Both male and female students overwhelmingly reported positive experiences with the module, and any observed differences in means are likely due to random variation rather than a true gender effect.

This result in table 4 suggests that the module is broadly effective and well-received across gender groups, supporting its curricular role for all students, regardless of gender. The findings indicate that most EFL students reported positive attitudes toward the critical reading module, including improvements in analytical skills, confidence, and academic engagement. Although some challenges, such as reading difficulty and workload, were identified, these did not significantly diminish the overall favorable perceptions. Importantly, the inferential analysis found no significant differences in attitudes between male and female students, indicating similar experiences across the two groups. These outcomes underscore the module's effectiveness in fostering critical academic skills and highlight its inclusivity, providing valuable implications for curriculum designers and teachers seeking to enhance critical reading instruction and ensure equitable learning experiences for diverse student populations.

Table 4

Independent-Samples t-Test Comparing Male and Female Students' Perceptions of the Critical Reading Module

Variable	Gender	n	M	SD	t	df	p
Perceived Benefits	Male	65	4.02	0.54	1.12	304	.264
	Female	241	4.10	0.51			
Perceived Challenges	Male	65	3.28	0.63	1.37	304	.172
	Female	241	3.17	0.59			

Note. M = mean; SD = standard deviation; df = degrees of freedom. Independent-samples t-tests indicated no statistically significant gender differences in students' perceptions of the critical reading module ($p > .05$). Female students reported slightly higher perceived benefits, whereas male students reported slightly greater challenges; however, these differences were not statistically significant.

5. Discussion

The findings of the current study provide important insights into how ESEF EFL students perceive and experience the critical reading module within Moroccan higher education. The overwhelmingly positive attitudes reported—reflected in high agreement rates for perceived benefits and strong mean scores—align with previous research that identifies critical reading as fundamental to academic achievement at the tertiary level (Hamdi, 2023; Wallace, 2003; Wilson, 2016). In line with international studies, the results here demonstrate that critical reading's perceived value is not unique to the Moroccan context but resonates with findings from similar educational environments where critical reading is positioned as essential for effective engagement with academic discourse. Moreover, students' recognition of skill transferability and

increased analytical capacity parallels the claims of Davies and Barnett (2015) and Collins (2022), who maintain that critical reading cultivates intellectual dispositions requisite for academic literacy and autonomy. Compared with studies in other EFL contexts, the present research corroborates the view that structured modules on critical reading positively influence students' attitudes and strengthen their academic preparedness, reinforcing the broader literature regarding the pivotal role of critical reading in higher education.

The challenges reported, such as reading difficulty and workload, align with the transitional struggles documented in the literature (Le et al., 2024; van Rooij et al., 2018). However, the fact that these challenges were not dominant and that difficulty scores hovered near the midpoint of the scale suggests that the critical reading module is generally accessible and well-supported within the EFL context. This aligns with Bakhtiari Moghadam et al. (2023), who found that supportive classroom environments and structured interventions can positively shift students' attitudes toward critical reading. Future research could build on these findings by employing longitudinal designs to examine how students' perceptions and experiences of critical reading evolve throughout their academic programs. In particular, qualitative studies using in-depth interviews, focus groups, or classroom observations should be conducted to explore the nuanced experiences of students facing specific challenges, such as managing complex readings or balancing workload. Such research could also investigate students' perspectives on the types of instructional support, feedback, and classroom practices they find most beneficial, thereby providing more targeted recommendations for practice (Baghit, 2026a; Baghit, 2026b; Baghit, 2026c).

A central and novel finding of this study is the absence of a significant gender difference in perceptions of the module. While some literature (e.g., Logan & Johnston, 2009; Rianto, 2021) has reported gender-based differences in reading strategies and attitudes, the present study's inferential analysis demonstrates that, within this Moroccan EFL context, both male and female students benefit similarly from the module. This result is particularly noteworthy given that much previous research either failed to systematically consider gender as a variable (Bakhtiari Moghadam et al., 2023; He & AlSaqqaf, 2025) or limited its role to demographic reporting. The finding that gender does not play a meaningful role in shaping attitudes suggests that the module's design and delivery are inclusive, providing equitable opportunities for engagement and skill development across student groups.

6. Conclusion

This study provides robust evidence for the positive impact and inclusivity of the critical reading module within Moroccan ESEF EFL higher education. Most students reported a range of academic and personal benefits, including enhanced

analytical skills, confidence, and engagement. Challenges, such as reading difficulty and workload, were present but not prevalent, indicating that the module is largely accessible and well-supported. Crucially, no significant gender differences emerged in students' perceptions, confirming that the module's design and delivery foster equitable experiences for both male and female learners.

7. Practical Implications

These results have important implications for curriculum developers and instructors. First, the generally positive reception affirms the value of critical reading as a pillar of EFL higher education and supports its continued inclusion and potential expansion. Second, while the reported challenges were not predominant, they indicate the need for concrete, targeted interventions. Specifically, curriculum designers and instructors should implement annotated reading guides for complex texts, provide step-by-step comprehension checklists, and develop instructional videos that model critical reading strategies. Further, dedicated time management workshops and explicitly scheduled reading sessions within the course calendar can support students in handling workload demands. Establishing peer-led discussion groups, supported by structured prompts, will promote collaborative engagement, while regular formative feedback sessions—utilizing rubrics that clarify evaluation criteria—will help students address comprehension difficulties. Third, the lack of gender differences underscores the success of current pedagogical approaches in promoting inclusivity, but also highlights the necessity of ongoing systematic monitoring, such as periodic surveys and focus group interviews, to detect emerging or nuanced disparities in future cohorts and adapt instructional practices accordingly. In sum, this study contributes to the literature by providing empirical evidence that a well-structured critical reading module is experienced as beneficial and accessible by diverse student populations. The findings underscore the need for ongoing attention to student experience and the importance of research that bridges curricular intentions with classroom realities. Future research should investigate how these practices can be adapted or extended across other institutional contexts and explore the long-term effects of critical reading modules on student outcomes using mixed-method or longitudinal approaches.

8. Limitations

This study's principal limitations pertain to its reliance on self-reported data, which may be influenced by social desirability bias, and its exclusive focus on ESEF institutions, which may limit the generalizability of the findings to a broader student population. To address these limitations, future research should employ methodological triangulation by integrating qualitative approaches—such as in-depth interviews, focus groups, and classroom observations—with quantitative data, in order to provide more comprehensive and nuanced insights into students' experiences and attitudes. Furthermore, adopting stratified or random sampling methods and including

participants from a wider range of institutional contexts would improve generalizability by ensuring the sampled population is more representative of Morocco's diverse higher education landscape. By capturing the perspectives of students from different regions, institutional types, and backgrounds, such sampling would allow findings to be more reliably extrapolated to the national level. Despite these limitations, the present study contributes meaningful insights into EFL students' attitudes toward critical reading.

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Chapter 32: Voices from the Margins of the Earth: Climate Crisis, Indigenous Epistemologies, and Environmental Justice in Contemporary Literary Discourse

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Abstract

We live, as Amitav Ghosh has powerfully observed, in an age that struggles to imagine its own catastrophe. Floods displace millions, forests burn across continents, and entire island communities face erasure — yet our dominant cultural narratives remain curiously ill-equipped to hold these realities. This paper begins with that discomfort. It asks why, and at whose cost. Through close readings of three widely accessible texts — Amitav Ghosh's *The Great Derangement: Climate Change* and the *Unthinkable* (2016), Robin Wall Kimmerer's *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (2013), and the United Nations' Sendai Framework for Disaster Risk Reduction 2015–2030 — this paper explores how literature, language, and policy discourse shape not only how we understand environmental crisis, but who is heard within it, and who is not. Drawing on ecocriticism, postcolonial theory, and the environmental humanities, this study argues that Indigenous ecological knowledge rooted in reciprocity, relationality, and generations of intimate observation has been consistently marginalised by Western scientific and developmental frameworks, often with devastating consequences for the very communities most exposed to climate risk and disaster. Kimmerer's work, in particular, reminds us that learning to listen differently is not a romantic gesture; it may be a matter of survival. What emerges from this reading is a challenge to the stories we have inherited about nature, progress, and human belonging. A just and sustainable future, this paper contends, cannot be built on policy alone it must begin with whose voice we are willing to hear, and whose knowledge we are willing to trust.

Keywords: *Ecocriticism, Indigenous Epistemologies, Environmental Justice, Climate Change Narratives, Disaster Resilience*

1. INTRODUCTION: THE STORIES WE TELL ABOUT THE EARTH

In his celebrated 2016 essay collection The Great Derangement: Climate Change and the Unthinkable, the Indian novelist and essayist Amitav Ghosh poses a question that ought to unsettle every scholar of the humanities: why has literary fiction, which prides itself on engaging the full spectrum of human experience, so conspicuously failed to grapple with climate change? Ghosh's provocation is not merely aesthetic. It points to a deeper epistemological failure — a collective inability, embedded in the very structures of modern Western culture, to accommodate environmental catastrophe within the conventions of serious literary narrative.

This paper takes Ghosh's challenge as its point of departure. It situates the question of ecological crisis within a broader interdisciplinary conversation that spans literary studies, postcolonial theory, environmental humanities, disaster studies, and the politics of knowledge — what scholars in the tradition of decolonial thought describe as Southern or non-Western ways of knowing, or the recognition that different cultural traditions produce different, and often incompatible, ways of knowing the natural world. In doing so, it contributes to the growing scholarly consensus that addressing the intertwined crises of climate change, environmental injustice, and disaster vulnerability requires not only scientific and policy solutions, but a fundamental rethinking of the narratives, languages, and knowledge systems that underpin those solutions.

The three primary texts examined in this paper have been selected for their accessibility, their disciplinary diversity, and their capacity to illuminate the central tensions of this debate from different vantage points. Ghosh's The Great Derangement (freely available in excerpted form through The Los Angeles Review of Books and various open-access academic platforms) offers a literary-critical diagnosis of Western culture's ecological failure of imagination. Robin Wall Kimmerer's Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants (widely excerpted online and available through most public library platforms) provides a corrective: a vision of ecological knowledge grounded in Indigenous Potawatomi tradition that challenges the extractive logic of mainstream Western science. The United Nations' Sendai Framework for Disaster Risk Reduction 2015–2030 (freely downloadable from the UNDRR website) brings the analysis into the domain of global policy, revealing the extent to which institutional frameworks for disaster resilience both invoke and constrain Indigenous and community-based knowledge.

This paper is structured as follows. Section Two outlines the theoretical framework and methodology. Section Three defines the research objectives. Section Four provides the close textual analysis. Section Five presents the principal findings.

Section Six discusses their implications for the environmental humanities and for interdisciplinary scholarship in the social sciences. Section Seven concludes.

2. THEORETICAL FRAMEWORK AND METHODOLOGY

2.1 Ecocriticism and the Environmental Humanities

This paper is grounded in ecocriticism a field that, since its consolidation in the 1990s through foundational texts such as Cheryll Glotfelty and Harold Fromm's The Ecocriticism Reader (1996), has expanded from its origins in North American nature writing to encompass postcolonial, feminist, and Indigenous perspectives. Ecocriticism asks, in its simplest formulation, how literature represents the natural world but it also asks whose representations count, whose are marginalised, and what material consequences follow from those representational hierarchies.

More recently, the broader field of the environmental humanities has extended ecocriticism's concerns into history, philosophy, anthropology, and the social sciences, producing what Rob Nixon, in his influential Slow Violence and the Environmentalism of the Poor (2011), calls an "environmentalism of the poor" an attention to the slow, cumulative, and frequently invisible forms of environmental harm disproportionately borne by marginalised communities in the Global South (Nixon -2). Nixon's concept of slow violence violence that occurs gradually, out of sight, and across time is a central analytical lens in this paper, particularly in its engagement with the Sendai Framework.

2.2 Postcolonial Ecology

Postcolonial ecocriticism, associated with scholars such as Graham Huggan and Helen Tiffin, Cajetan Iheka, and Susie O'Brien, provides a second theoretical pillar. This framework insists that ecological crisis cannot be understood apart from the histories of colonialism that produced it. The extraction of natural resources, the dispossession of Indigenous peoples from their lands, and the suppression of non-Western ecological knowledge systems are not incidental to the current environmental crisis they are constitutive of it. As Kimmerer demonstrates throughout Braiding Sweetgrass, the Potawatomi language encodes a relationship with the natural world that Western science systematically erased: what Kimmerer calls a 'grammar of animacy' (Kimmerer 48) a linguistic refusal that refuses the objectification of the more-than-human world.

2.3 Methodology

The methodology of this paper is qualitative and hermeneutic, combining close reading with discourse analysis. Close reading the foundational method of literary studies — attends to the specific linguistic, narrative, and rhetorical strategies through

which texts construct meaning. Discourse analysis, drawn from the social sciences, examines how language functions within and reproduces structures of power. Together, these methods allow this paper to move between the micro-level (the specific word choices and narrative strategies of its primary texts) and the macro-level (the broader discursive formations Western science, development economics, international policy — within which those texts are embedded).

Primary texts are read against a body of secondary scholarship in ecocriticism, postcolonial theory, disaster studies, and Indigenous studies. Where possible, this paper draws on open-access sources to ensure the research is replicable and accessible to scholars working in a range of institutional contexts.

3. RESEARCH OBJECTIVES

This paper pursues five interconnected objectives:

First, to examine how contemporary literary and non-fiction texts construct, contest, and imagine alternatives to dominant narratives of environmental crisis, with particular attention to the role of language and narrative form in shaping ecological perception.

Second, to demonstrate that Indigenous ecological epistemologies — specifically the Potawatomi knowledge encoded in Kimmerer's work offer substantive intellectual and ethical resources for responding to environmental crisis, and that their marginalisation has concrete material consequences.

Third, to analyse the ways in which global policy frameworks such as the Sendai Framework simultaneously acknowledge and constrain non-Western and community-based knowledge in the governance of disaster risk.

Fourth, to position literary analysis as an indispensable method within the interdisciplinary study of environmental justice and sustainable development — not a supplementary ornament to the social sciences, but a mode of inquiry capable of revealing what quantitative and policy-oriented approaches cannot.

Fifth, to contribute to the ongoing debate, within humanities and social sciences scholarship, over what a genuinely decolonial environmental humanities might look like — and what it demands of scholars, institutions, and policy-makers.

4. TEXTUAL ANALYSIS

4.1 Amitav Ghosh and the Failure of the Literary Imagination

Ghosh opens The Great Derangement with a personal anecdote: as a young man in Delhi, he witnessed a freak tornado tear through the city an event so

meteorologically improbable that it seemed, in his words, to belong to the world of myth and fable rather than to the domain of ordinary experience (Ghosh 3–4). This anecdote is not merely illustrative. It is the hinge on which Ghosh's entire argument turns. The event was real; the tornado happened. But it had the structure of the uncanny it felt, to those who witnessed it, like something that should not have been possible within the predictable, orderly world that modernity had promised.

For Ghosh, this is precisely the problem. Modern literary fiction the novel in particular is built on what he calls a "presumption of regularity" (Ghosh 16). Its narrative conventions are calibrated to represent human experience as it unfolds within a stable, predictable natural world. Climate change, by contrast, is characterised by radical unpredictability, by events of a scale and temporality that defeat the conventions of individual human experience. The serious novel, Ghosh argues, has not yet found a form adequate to the climate crisis and this is not accidental. It reflects a deeper failure of the Western cultural imagination to take seriously the agency and turbulence of the non-human world.

> *"The climate crisis is also a crisis of culture, and thus of the imagination. [...] The novel, which became the dominant form of the culture of nation-states, is, in many ways, the ideal instrument for the imagining of both nation and empire — but precisely because of this, it is also deeply complicit in the erasure of the non-human." (Ghosh 8-9)*

This observation has significant implications for the environmental humanities. If the dominant cultural forms through which Western modernity has imagined itself are structurally unsuited to representing ecological crisis, then the challenge facing scholars of literature is not simply to find better stories about climate change. It is to ask what deeper assumptions about the relationship between human beings and the natural world, about causality and temporality, about whose experiences count as the proper subject of narrative must be dismantled before such stories become possible.

Ghosh locates a partial answer in non-Western literary traditions, and in particular in the literatures of those regions South Asia, the Pacific, sub-Saharan Africa that have never been able to take the stability of the natural world for granted. Here, postcolonial literature offers resources that the Western tradition has suppressed: a familiarity with catastrophe, with displacement, with the kind of slow violence that Nixon describes, and with modes of ecological perception grounded in relationship rather than extraction.

4.2 Robin Wall Kimmerer and the Grammar of Animacy

If Ghosh diagnoses the problem, Kimmerer offers something closer to a cure or at least the beginning of one. Braiding Sweetgrass is structured as a series of essays, each rooted in a particular plant or ecological relationship, and each weaving together scientific botany and Potawatomi traditional knowledge in a way that refuses the conventional hierarchy between them. Kimmerer is both a professor of botany and a member of the Citizen Potawatomi Nation, and it is precisely this dual positioning that gives her work its distinctive analytical and ethical force.

Central to Kimmerer's argument is the concept of what she calls the "grammar of animacy" the observation that the Potawatomi language, unlike English, does not distinguish between animate and inanimate beings. In Potawatomi, a bay, a stone, a tree, or a river is addressed with the same grammatical pronoun as a person. This is not merely a linguistic curiosity. It encodes a fundamentally different ontological relationship with the non-human world one in which reciprocity, gratitude, and responsibility are the constitutive terms of ecological belonging, rather than ownership, extraction, and control (Kimmerer 48–57).

> *"In the beginning there were the languages, which told the people who they were, how to care for each other and for the land. Language was not just communication; it was a covenant with the living world." (Kimmerer 48–49)*

Kimmerer's challenge to the Western scientific tradition is not anti-science. She is a scientist; she respects the methods and achievements of botany. But she insists that science, as it has been practised within the colonial tradition, has systematically stripped the natural world of the relational qualities the agency, the communicative capacity, the claim on human responsibility that Indigenous knowledge systems have always recognised. The result is not merely an ethical impoverishment. It is an epistemological one: Western science has rendered itself incapable of perceiving the very relationships that make ecological health possible.

This argument connects directly to the question of disaster resilience. Communities that understand their ecological environments in relational terms that maintain what Kimmerer calls a "covenant with the living world" are not simply better positioned to respond to environmental disruption. They possess forms of knowledge about local ecological dynamics, seasonal variation, species interdependency, and environmental thresholds that no satellite data or hydrological model can replicate. The marginalisation of this knowledge is, therefore, not merely a cultural injustice. It is a practical catastrophe.

4.3 The Sendai Framework: Policy, Knowledge, and the Limits of Recognition

The United Nations' Sendai Framework for Disaster Risk Reduction 2015–2030 represents the most comprehensive global policy framework for managing disaster risk currently in existence. Adopted in March 2015 at the Third UN World Conference on Disaster Risk Reduction, the Framework sets out four priorities for action: understanding disaster risk; strengthening disaster risk governance; investing in disaster risk reduction for resilience; and enhancing disaster preparedness for effective response and recovery.

What is striking, from the perspective of this paper, is the Framework's explicit acknowledgement of Indigenous and local knowledge. Priority One understanding disaster risk states clearly that disaster risk policies should be "based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment" and that this understanding should draw on "traditional, indigenous and local knowledge" alongside scientific knowledge (UNDRR 14).

This is a significant step forward from earlier international frameworks, and it reflects the influence of Indigenous advocacy organisations and postcolonial scholars on the global policy agenda. Yet a closer reading of the Framework's language reveals the limits of this recognition. Throughout the document, Indigenous and local knowledge is consistently positioned as supplementary as a source of "complementary" information to be integrated into scientific risk assessments, rather than as an autonomous epistemological tradition with its own methods, standards, and claims to validity.

This rhetorical positioning is not politically neutral. It reproduces what the postcolonial theorist Walter Mignolo calls the "colonial matrix of power" (Mignolo 2–3) the tendency of dominant knowledge systems to incorporate the knowledge of marginalised communities while maintaining their own epistemological primacy. The Framework acknowledges Indigenous knowledge; it does not, on the whole, trust it. And this has consequences. Communities that possess deep, locally specific knowledge about environmental hazards knowledge accumulated across generations and encoded in stories, practices, and seasonal rituals find that knowledge filtered through, and frequently discounted by, the categories and methods of Western disaster science.

The gap between acknowledgement and genuine epistemic justice is one of the central problems facing the contemporary environmental humanities, and it is one that cannot be resolved by policy reform alone. It requires, as both Ghosh and Kimmerer suggest in their different ways, a transformation in the stories we tell about knowledge itself.

5. FINDINGS

The analysis undertaken in this paper yields five principal findings, which are presented here in summary form before being developed in the discussion that follows.

Finding 1: The Crisis of Literary Form is a Crisis of Epistemology

Ghosh's diagnosis of Western literature's failure to represent climate change is not simply a formal problem susceptible to formal solutions. It reflects a deeper epistemological crisis: the inability of a cultural tradition that has grounded itself in human exceptionalism and the mastery of nature to perceive, let alone narrate, the agency and turbulence of the non-human world. Addressing this crisis requires not merely new literary forms, but a willingness to learn from cultural traditions — including Indigenous traditions — that have always taken the agency of the non-human world seriously.

Finding 2: Language Encodes Ecological Relationships

Kimmerer's analysis of the Potawatomi grammar of animacy demonstrates that language is not a neutral medium for the transmission of pre-existing knowledge about the natural world. Language actively constitutes ecological relationships, encoding values of reciprocity or extraction, relationship or ownership, responsibility or indifference. The dominance of English and of the ontological assumptions embedded in its grammar in global environmental discourse is therefore not linguistically neutral. It systematically marginalises the relational ecological ontologies encoded in Indigenous languages, with material as well as cultural consequences.

Finding 3: Indigenous Knowledge is Systematically Marginalised by Policy

The Sendai Framework's treatment of Indigenous and local knowledge reveals a persistent epistemological hierarchy in global environmental governance. Despite explicit commitments to the inclusion of traditional knowledge, the Framework's discursive structure positions such knowledge as supplementary to, rather than coordinate with, Western scientific knowledge. This marginalisation is not merely symbolic. In contexts of disaster risk and climate vulnerability, where the knowledge that communities possess about their local environments can be literally life-saving, the systematic discounting of Indigenous epistemologies constitutes a form of institutional violence.

Finding 4: Slow Violence is a Narrative as well as a Material Problem

Nixon's concept of slow violence the gradual, incremental, frequently invisible environmental harm disproportionately borne by marginalised communities is not only a material phenomenon. It is a narrative one. The invisibility of slow violence is partly

a function of the fact that it does not conform to the temporal and spatial conventions of dominant media and literary culture. The environmental humanities have a specific and indispensable role to play in making slow violence visible — in developing narrative forms, interpretive frameworks, and representational strategies adequate to the scale and temporality of ecological crisis.

Finding 5: A Decolonial Environmental Humanities is Both Necessary and Possible

Taken together, the three primary texts examined in this paper point towards the possibility of what might be called a decolonial environmental humanities: an interdisciplinary practice grounded in epistemic humility, attentive to the knowledge produced at the margins of Western modernity, and committed to the kind of deep listening that Kimmerer describes as the first obligation of ecological belonging. This is not a utopian project. It is a practical one, with specific implications for pedagogy, research methodology, institutional policy, and the politics of knowledge production.

6. DISCUSSION: IMPLICATIONS FOR THE ENVIRONMENTAL HUMANITIES

The findings of this paper have several significant implications for the environmental humanities and for interdisciplinary scholarship in the social sciences. This section develops three of the most important.

6.1 Literary Analysis as a Mode of Environmental Justice

One of the most important claims of this paper is that literary analysis is not peripheral to the study of environmental justice. It is central to it. This is because environmental justice is not only a question of the distribution of environmental burdens and benefits though it is certainly that. It is also a question of recognition: of whose knowledge counts, whose suffering is visible, and whose experience of the natural world is taken seriously. These are questions that literary analysis is uniquely positioned to address.

Close reading can reveal the narrative strategies through which environmental harm is made invisible or natural. Discourse analysis can expose the epistemological hierarchies encoded in policy language. Comparative literary study can bring into dialogue the ecological knowledge encoded in Indigenous, postcolonial, and other marginalised literary traditions. In each case, literary methods produce forms of knowledge that are indispensable to a full understanding of environmental justice and that cannot be replicated by quantitative or policy-oriented approaches.

6.2 The Politics of Knowledge in the Climate Crisis

The analysis of the Sendai Framework offered in this paper points to a broader problem in the governance of the climate crisis: the tendency of dominant institutions to incorporate the knowledge of marginalised communities while maintaining their own epistemological authority. This problem is not unique to disaster risk reduction. It is endemic to the global environmental governance system as a whole, from the Intergovernmental Panel on Climate Change to the Convention on Biological Diversity.

Addressing it requires more than the inclusion of Indigenous and local knowledge in scientific and policy processes though such inclusion is necessary. It requires a willingness, on the part of institutions and scholars, to allow that knowledge to challenge and transform the frameworks within which it is received. This is what Kimmerer calls "learning to listen differently" and it is among the most difficult and most necessary tasks facing the environmental humanities today.

6.3 Pedagogy and the Environmental Classroom

This paper also has implications for pedagogy. The three texts examined here Ghosh, Kimmerer, and the Sendai Framework are not only significant scholarly resources. They are also, in different ways, extraordinarily teachable texts. Ghosh's essay prose is accessible and urgently contemporary; Kimmerer's lyrical non-fiction offers students an experience of ecological knowledge radically different from any they are likely to have encountered in conventional science education; and the Sendai Framework provides a valuable opportunity for students to practice the kind of critical policy reading that is increasingly essential in an era of climate governance.

Bringing these three texts into dialogue in the humanities classroom — across departments of English, history, sociology, political science, and environmental studies would contribute to precisely the kind of interdisciplinary, decolonially-oriented environmental literacy that the present conjuncture demands.

7. CONCLUSION: TOWARDS A JUST ECOLOGICAL IMAGINATION

This paper began with a question: why, at the moment of the greatest ecological crisis in human history, do our dominant cultural narratives remain so ill-equipped to hold it? Through close readings of Ghosh, Kimmerer, and the Sendai Framework, it has argued that the answer lies not in any failure of individual imagination, but in the structural limitations of a Western cultural tradition that has grounded itself in the mastery and objectification of the natural world — and in the systematic marginalisation of the Indigenous and non-Western knowledge traditions that have always known better.

The environmental humanities, at their best, offer a form of scholarship that takes this problem seriously: that attends to the stories we tell about nature, that listens

for the voices that have been silenced, and that refuses to treat the current crisis as simply a technical problem to be solved by better science and better policy. It is a form of scholarship that insists, with Kimmerer, that the natural world is not a resource to be managed but a community of which we are members and that our survival depends on our willingness to act accordingly.

The book of which this paper forms a part Contemporary Issues in Humanities and Social Sciences: Interdisciplinary Perspectives represents a commitment to exactly this kind of scholarship. The environmental crisis is not only a scientific or political emergency. It is a crisis of meaning, of narrative, of knowledge. Addressing it will require every disciplinary resource available to us and the humility to recognise that some of the most important resources are those that Western modernity has most systematically suppressed.

A just ecological imagination, this paper has argued, is not a luxury, it is a survival skill.

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Chapter 33 : An Analysis of how the 'Statelessness' of plantation workers influenced their exclusion from Kannangara's Free Education Framework

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Abstract

C.W.W. Kannangara's 1945 Free Education Act aimed to make education a fundamental right for all, regardless of wealth or caste. However, it introduced a gap between Indian Tamil plantation workers and other communities; therefore, the tea plantation communities were left behind. Although education is a basic human right, the lack of citizenship made it impossible for tea plantation workers to obtain the right to education. The main research question asks how the lack of legal status for Indian Tamil plantation workers led to their exclusion from the 1945 national education framework, and what the long-term consequences of this omission were. This study uses an qualitative historical research methodology to explore this link. The theories applied include social exclusion theory, postcolonial theory, and structural inequality theory, among others. I used educational commission reports, the Citizenship Act, and Hansard reports as primary sources, alongside journal articles, theses, and historical studies as secondary sources. I aim to analyze historical deprivation, social vulnerability, and legal frameworks, specifically looking at the 1948 Citizenship Act and how it defined who was eligible for education. The findings of this research indicate that access to national education was tied to citizenship. Because plantation workers were deemed non-citizens, the state felt no duty to build schools for them. Furthermore, British estate owners wanted to keep children on the plantations to pick tea, and the educational gap created in 1945 is the direct cause of the low literacy and high poverty levels seen in the plantation sector in the 21st century. Ultimately, Dr. Kannangara's revolution was a great success for many, but it had a hidden boundary. Because plantation workers were considered stateless non-citizens, they were left out of the national school system. This created a permanent education gap between the estates and the rest of the country.

Keywords: Dr. Kannangara, Educational marginalization, Free Education Act, Plantation workers, Stateless

Introduction

Traditionally, education has been thought of as a basic tool for social mobility, equality and national development. During the period of British colonial rule, Ceylon's education system was highly unequal and largely the preserve of urban elites and privileged social groups. Education was dominated by missionary schools run by Christian organizations. Rural and marginalized communities had very limited access to quality schooling. English medium education emerged as a symbol of social prestige and administrative opportunity resulting in huge disparities between urban and rural populations. Meanwhile, the plantation sector, a product of British colonial capitalism, remained socially and economically isolated from the rest of the country. During the nineteenth and early twentieth centuries, the British imported thousands of Tamil laborers from South India to work on the tea, coffee, and rubber estates of the central highlands of Ceylon. These plantation workers toiled under harsh working conditions, substandard housing, low wages, and little access to health care or education.

Plantation communities were seen by colonial administration as a labor force more than a socially integrated population. The British estate system resulted in a segregated social system in which plantation laborers were geographically isolated and economically dependent on estate management. Education on the plantation estates was very limited and many children of plantation workers received no formal schooling. This led to extreme educational and social marginalization of the plantation Tamil communities even before independence.

Major educational reforms were introduced in the 1940s by C. W. W. Kannangara to overcome the educational inequalities of the colonial period. Kannangara, who is widely known as the "Father of Free Education" in Sri Lanka, wanted to democratize education by providing free schooling to children of all classes, castes, religions and geographic locations. The introduction of free education from kindergarten to university level, the expansion of vernacular education and the establishment of Central Schools were a watershed in the history of education in Sri Lanka. The reforms were intended to reduce the inequalities between classes and create equal educational opportunities for all citizens.

However, despite the universal ideals embedded within the free education framework, not all communities benefited equally from these reforms. Among the most marginalized groups were the plantation Tamil workers, also known as Hill Country Tamils or Indian Tamils, who continued to experience exclusion even after independence. Following Sri Lanka's independence in 1948, the enactment of citizenship laws such as the Ceylon Citizenship Act of 1948 and the Indian and Pakistani Residents Act of 1949 rendered a large number of plantation Tamils stateless.

This statelessness deprived them not only of citizenship and voting rights but also of meaningful access to state welfare, political representation, and social protection.

Although free education officially existed for all citizens, plantation workers faced multiple structural barriers that limited their participation in the national education system. These barriers included poverty, geographical isolation, lack of educational infrastructure within plantation areas, language-related difficulties, and political marginalization. The absence of citizenship and political representation further weakened their ability to demand equal educational opportunities from the state. Consequently, the benefits of the Kannangara reforms were not equally distributed among all communities in post-colonial Sri Lanka.

Accordingly, the aim of this study is to explore the role of the statelessness of the plantation workers in their marginalization from the C. W. W. Kannangara's free education system in post-independent Sri Lanka. This paper addresses the tension between the general principles of free education and the lived realities of exclusion among plantation Tamil communities. This study aims to contribute to a broader understanding of the nexus of citizenship, education and social inequality by investigating the influence of colonial legacies, state policies and postcolonial nation-building processes on educational opportunities of marginalized communities in Sri Lanka.

Kannangara Reforms and Free Education

The educational policies of C.W.W. Kannangara have made a immense impact in Sri Lankan society. Before studying about his thoughts on education, one should get an idea into the education system and thinking that prevailed in Sri Lanka. During the colonial period in Sri Lanka, the education system developed under the influence of British administrative policies and Christian missionary organizations. The primary objective of the British colonial administration was to produce a local group of clerks and officials required for colonial administration. Therefore, English-medium education was given special importance. At that time, most schools were run by Christian missionary organizations and were mainly concentrated in urban and coastal areas. This has resulted in a very restricted access to quality education for rural communities and economically weak groups. Gradually, English education became a symbol of social prestige and a key to government employment and higher social status. This transformed education into a social privilege instead of a universal right, with segregation on the basis of class, religion and place of residence.

Furthermore, children of plantation Tamil workers living in estate sectors had very limited access to education. Since the British plantation economy focused mainly on maximizing labor productivity, little attention was given to the welfare or education of plantation workers. Estate communities remained geographically isolated and socially

marginalized, and educational facilities within plantations were poorly developed. Therefore, the colonial education system contributed significantly to the creation and continuation of social and educational inequalities in Sri Lanka.

Kannangara core tenets of this transformative Free Education framework can be deconstructed into several structural pillars

1. The Zero-Tuition Fee Policy (Introduction to free education)

The zero tuition fee policy introduced under the education reforms of Mr. C. W. W. Kannangara is considered to be the most revolutionary aspect of the free education system in Sri Lanka. Before these reforms, since most schools charged fees for education, access to quality education was limited to the wealthy and socially privileged groups. As a result, children from poor and rural families were unable to continue their education.

Kannangara strongly believed that education should not depend on a person's economic background. Therefore, he pointed out that education should be completely free "from kindergarten to university". This meant that students could access education at all levels without paying tuition fees. This policy applied not only to government schools, but also to state-aided sectarian schools managed mainly by religious institutions. By bringing these schools under the framework of free education, the government sought to expand access to education to a wider population.

This reform brought about a major transformation in the educational philosophy of Sri Lanka. Previously, education had operated mainly as a privilege available to those with economic wealth and social status. The zero-tuition fee policy separated educational opportunity from economic capital by allowing poor students to access the same educational institutions as wealthy students. In other words, a child's ability to receive an education no longer depends on family income. However, despite the universal ideals of the Zero-Tuition Fee Policy, not all communities benefited equally from it. Plantation Tamil communities remained marginalized due to poverty, geographical isolation, poor school infrastructure, and later, statelessness after independence. Therefore, although tuition fees were removed, structural inequalities continued to prevent plantation workers and their children from fully accessing the benefits of free education.

2. The Central Schools System (*Madhya Maha Vidyalayas*)

Kannangara envisioned and established the Central Schools (Madhya Maha Vidyalayas) network throughout rural electorates to democratize access to high quality secondary education that had been historically geographically concentrated in urban networks such as Colombo.

These institutions were designed as rural model schools, heavily subsidized and equipped with modern infrastructure, including scientific laboratories, comprehensive curricula (bridging the sciences, mathematics, and humanities), and extracurricular facilities equal to urban elite colleges.
To transcend geographic barriers, the state provided free boarding facilities (Hostals) and competitive merit-based scholarships, enabling talented students from remote peripheries to pursue uninterrupted secondary and tertiary education.

3. Mother Tongue Education (*Swabhasha*)

Under the colonial administration, English proficiency operated as an exclusionary gatekeeper to public sector employment and social mobility. Mother Tongue Education was one of the major components of C. W. W. Kannangara's educational reforms introduced during the 1940s. During the British colonial period, English was the dominant language in administration, higher education, and prestigious schools. As a result, children who were educated in English received better employment opportunities and social recognition, while the majority of rural children who spoke Sinhala or Tamil remained educationally and socially disadvantaged.

Kannangara recognized that the English-centered education system created serious social inequalities. Many children from rural and low-income families were unable to understand or access English-medium education. Therefore, he promoted education in the mother tongue, mainly Sinhala and Tamil, to make education more accessible to ordinary people throughout the country.

The introduction of mother tongue education enabled students to learn subjects in their first language, improving understanding, participation, and literacy. It also allowed children from rural communities to continue their education without the language barriers that previously existed under the colonial education system. Through this reform, education became more inclusive and socially accessible to broader sections of society.

However, despite these reforms, the benefits of mother tongue education were not equally distributed among all communities. Tamil communities in the plantation sector continued to face difficulties due to inadequate Tamil medium schools, a shortage of trained teachers, poor educational infrastructure, and geographical isolation within the estate sectors. In addition, the political and social marginalization of plantation workers after independence limited their ability to fully benefit from these educational reforms. Therefore, although mother tongue education was intended to create equity and accessibility, Tamil children in the plantation sector remained educationally disadvantaged in practice.

4. Expansion of Rural Education

Kannangara pointed out that educational inequality was closely related to geographical inequality. Rural villages lacked schools, teachers, transportation, and educational resources. Therefore, the reforms focused on expanding educational facilities throughout the country. More schools were opened in rural areas and attempts were made to improve teacher and school infrastructure distribution. The expansion provided the first opportunity for many rural children to enter the formal education system.

5. Equal Educational Opportunities.

The reforms aimed to democratize education, reduce inequalities based on social class, caste, religion, ethnicity and geography. In the period before the reforms, children from elite families had much better educational opportunities than children from poor families. Kannangara sought to create a system under which every child, irrespective of social background, could have an education. The idea was based on the principles of social justice and equality. But even with these intentions, certain marginalized communities such as plantation Tamils remained excluded due to structural and political barriers.

6. **Scholarship Programs**

Scholarship examinations and financial assistance programs were introduced to support talented students from low-income families. Many rural students were academically capable but unable to continue education due to poverty. Scholarship schemes provided opportunities for such students to enter prestigious schools and continue higher studies. This reform contributed to upward social mobility and helped reduce class barriers in education.

7. Teacher Training and Educational Quality

Kannangara understood that educational expansion alone was not sufficient without qualified teachers. Therefore, reforms also focused on improving teacher training institutions and increasing the quality of education. Teacher training colleges were strengthened to produce professionally trained teachers capable of serving both urban and rural schools. This helped standardize educational quality throughout the country.

The Plantation Tamil Community

The Plantation Tamil community, also known as Indian Tamils, Hill Country Tamils, or Malayaga Tamils, constitutes one of the most historically marginalized communities in Sri Lanka. Their origins are closely connected to the expansion of the British plantation economy during the nineteenth and early twentieth centuries. Under British colonial rule, thousands of Tamil laborers were brought from South India to Ceylon to work

primarily on tea, coffee, and rubber plantations established in the central highlands of the country. These workers were recruited as a cheap and controllable labor force to support the colonial export economy.

After their arrival in Ceylon, plantation Tamil workers were settled in estate sectors that were geographically isolated from the rest of society. The plantation system created a segregated social structure in which estate communities remained economically dependent on plantation management and socially separated from mainstream Sri Lankan society. Most plantation workers lived in overcrowded line rooms with poor sanitation, inadequate healthcare facilities, and limited access to clean water and other basic services. Infrastructure development within plantation areas remained extremely weak compared to urban and rural regions outside the estates. Educational opportunities for plantation Tamil children were also highly limited. Estate schools often lacked trained teachers, educational resources, and proper facilities, preventing many children from receiving quality education. Poverty and harsh labor conditions further contributed to low literacy rates and school dropout levels within plantation communities.

In addition to economic and social marginalization, plantation Tamils experienced minimal political representation both during and after the colonial period. Following Sri Lanka's independence in 1948, citizenship laws rendered a large number of plantation Tamils stateless, depriving them of voting rights and political participation. This political exclusion further weakened their access to state resources and welfare services, including education.

Therefore, the plantation Tamil community became one of the most socially, economically, and politically disadvantaged groups in Sri Lanka. Their historical experiences of isolation, poverty, statelessness, and exclusion played a significant role in limiting their ability to benefit equally from national development policies such as C. W. W. Kannangara's free education reforms.

Statelessness after Independence

The advent of independence for Ceylon in February 1948 was hailed as a victory for self-determination, but at the same time marked the onset of a state-sponsored project of structural exclusion. The first task facing the newly created post-colonial government, led by the mainstream nationalist elite, was to determine the legal boundaries of the new nation-state. But the central political anxiety of this elite was the demographic and political weight of the Up-Country (Indian origin) Tamil population. This community was brought to the island in the nineteenth century by the British colonial administration as indentured labor to sustain the coffee, rubber and tea plantations. It had grown to represent more than one-tenth of the island's total population.

The Ceylon Citizenship Act of 1948

One of the most controversial and significant laws passed in Sri Lanka in the post-independence period was the Ceylon Citizenship Act No. 18 of 1948. It was passed just six months after the country gained independence from British rule and set out legal criteria for who could officially call themselves a citizen of the new nation. In practice, the Act was deliberately designed to deprive the citizenship of the majority of Indian-origin Tamil plantation workers and make them stateless. In many democratic nations, citizenship is granted via jus soli meaning if you are born on the country's soil, you are automatically a citizen. The 1948 Act completely rejected this principle. Instead, it enforced a strict regime of jus sanguinis (citizenship by descent or bloodline). Under this law, being born in Ceylon was not enough. To be recognized as a citizen, an applicant had to prove a multi-generational family lineage tied to the country. The Act divided citizenship into two strict categories,

Citizenship by Descent

To claim citizenship by descent, an individual had to prove that,

1. They were born in Ceylon, and their father was also born in Ceylon.
2. If they were born outside Ceylon, they had to prove that their father and paternal grandfather (or paternal grandfather and great-grandfather) were born in Ceylon.

Citizenship by Registration

> This was a highly restricted pathway for individuals who did not meet the strict descent criteria but had long-term residency. However, the bureaucratic hurdles, financial costs, and stringent requirements made it virtually impossible for an ordinary working-class person to successfully register.

By 1948, they numbered over 700,000 people (roughly 11% of the island's total population). The post-independence government, led by Prime Minister D.S. Senanayake and the United National Party (UNP), pushed for the Act due to two primary anxieties,

The plantation workers were very unionized and well organized and returned left wing socialist parties or their own representatives from the Ceylon Indian Congress (CIC) by a large majority in the 1947 general election. The ruling elite feared that this large left-leaning labour bloc would pose a permanent threat to their political hegemony, especially in the rural Kandy electorates.

But the ruling elite had a strong ethno-nationalist narrative which regarded the plantation workers as "temporary economic migrants" loyal to India and not permanent residents of Ceylon. Indeed, by 1948, generations of plantation workers had been born on the island and had no connection to India.

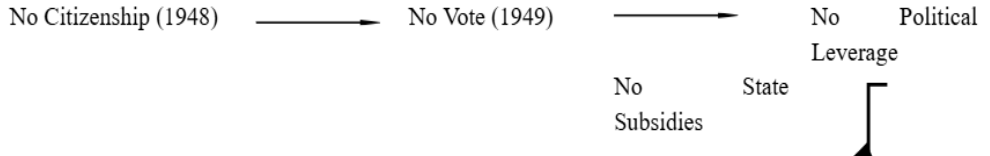
These workers had been seen as a source of extractive labor by the British colonial state and private plantation companies; they had never held rigorous, systematic civil registration systems for births and marriages within the estates. More than 700,000 lost their legal status overnight because they could not produce the paperwork to meet the state's strict legal requirements. They were no longer recognized as citizens by Ceylon, and since they had settled abroad permanently, India did not recognize them as citizens either.

The Parliamentary Elections Amendment Act No. 48 of 1949 was quickly passed by the government when the laborers were officially categorized as non-citizens. According to this law, voting was restricted to citizens. The voter registration books were immediately cleared of all plantation voters. Successive governments contended that the state was not required by the Constitution to use public funds for their social infrastructure since they were no longer citizens. This left their education in the hands of profit-driven private tea businesses, so shielding the plantation sector from the egalitarian advantages of Dr. C.W.W. Kannangara's Free Education Framework.

Parliamentary Elections Amendment Act of 1949

Before 1949, voting rights in Ceylon followed the Solebury Constitution and colonial rules. These laws allowed people to vote based on residency instead of strict citizenship. Indian-origin plantation workers had lived and worked on the island for years, so they could legally vote, as shown in the significant 1947 general election. The 1949 Amendment Act changed everything with one harsh clause: To be eligible to vote, or to stay on the electoral register, a person had to prove they were a citizen of Ceylon under the 1948 Act. In the 1947 elections, the heavily unionized plantation workers voted strategically. They elected eight members of the Ceylon Indian Congress (CIC) and supported Marxist and socialist parties in nearby Kandyan electorates. The ruling elite saw that if these workers remained in the electorate, the conservative establishment's grip on power was in danger. As a result of these activities, the government declared them stateless using the 1948 Act. Then, with the 1949 Act, they removed them from voter registries. In the 1947 election, over 100,000 plantation workers voted, but by the 1952 election, that number had dropped to almost zero.

Thus, the political equations of exclusion are as follows,



Because the 1949 Act turned plantation districts into electoral dead zones without any voting power, politicians after independence had no reason to invest in state infrastructure there. In the 1950s, when Dr. Kannangara's free education framework was expanded across the island by building Madhya Maha Vidyalayas, these schools were intentionally constructed in areas where rural peasants could vote. The plantation sector was completely ignored because its stateless residents had no electoral leverage to request such schools.

The loss of citizenship and voting rights had long-term social, economic, and educational consequences for plantation communities. Stateless plantation Tamils were excluded from meaningful participation in national politics and had limited access to state welfare programs, government services, and public resources. Without political representation, their educational needs received little attention from policymakers, contributing to the continued underdevelopment of schools and educational infrastructure in plantation areas.

Although later agreements and citizenship acts attempted to address the problem of statelessness, the issue continued for several decades. Agreements such as the Sirima-Shastri Pact of 1964 and subsequent citizenship legislation only partially resolved the crisis, while many plantation Tamils remained socially and politically marginalized for years. Therefore, statelessness became a major factor contributing to the exclusion of plantation Tamil communities from the social benefits and equal opportunities promised by post-independence national reforms, including C. W. W. Kannangara's free education framework.

How Statelessness Influenced Educational Exclusion

When the post-independence state institutionalized the disenfranchisement of the Up-Country Tamil community, it did more than alter voter registries; it fundamentally reshaped the contours of state protection and public obligation. Dr C.W.W. Kannangara's Free Education Ordinance of 1943, although philosophically based on the democratic ideal of universal human development, was institutionally dependent on the machinery of the nation-state. By denationalizing plantation workers, the state

effectively pushed them outside the protective umbrella of the national social contract. The public spending on social infrastructure in a modern welfare state is the state's investment in its future citizens, with the promise of long-term civic and economic dividends. The post-colonial state, however, viewed the education of the stateless plantation proletariat, a legally defined transient, non-citizen labour force, as a misallocation of national resources on "foreign nationals" rather than a public duty. This structural philosophy was put into practice on the ground through three separate institutional mechanisms of exclusion,

Lack of Educational Resources

One of the major consequences of the statelessness and political marginalization of plantation Tamil communities was the severe lack of educational resources in plantation schools and institutions. Although Sri Lanka's free education policy aimed to provide equal educational opportunities to all children, plantation educational institutions remained neglected and underdeveloped for decades.

Schools located in plantation estates suffered from inadequate infrastructure, including poorly constructed classrooms, lack of libraries, science laboratories, furniture, sanitation facilities, and teaching materials. Many schools functioned with minimal government support and received fewer financial allocations compared to schools in urban and rural areas outside the plantation sector.

In addition to poor physical infrastructure, plantation schools also experienced a serious shortage of qualified teachers. Many trained teachers were unwilling to work in isolated estate areas due to poor living conditions and limited facilities. As a result, students in plantation schools often received a lower quality of education compared to students in other parts of the country.

The lack of educational resources was closely connected to the political exclusion of plantation Tamils after independence. Since many plantation workers were rendered stateless and lost their voting rights, plantation communities had little political influence to demand better schools, educational facilities, or government investment. Consequently, plantation educational institutions remained marginalized within the national education system.

Insufficient Physical and Pedagogical Infrastructure

One of the principal reasons for the educational marginalization of the plantation Tamil communities was the inadequate physical and pedagogical infrastructure in plantation schools. Although C. W. W. Kannangara's free education reforms sought to broaden

educational access throughout the country, plantation educational institutions were severely neglected.
Many plantation schools had very poor physical infrastructure. Many schools had no permanent buildings, adequate classrooms, libraries, laboratories, furniture, sanitation facilities, clean water supply or proper transportation access. Estate schools often suffered from overcrowding, and operated with limited educational resources relative to schools in urban and rural areas. Due to geographical isolation and limited state investment, the development of educational infrastructure in plantation regions remained weak for decades.

In addition to physical underdevelopment, plantation schools lacked proper pedagogical infrastructure. There was a serious deficiency of qualified and professionally trained teachers in the estate sectors. The poor living conditions, the isolation and the lack of facilities made many teachers unwilling to work in the plantation areas. Plantation students often received poor quality teaching and inadequate academic guidance as a result. Plantation schools also often lacked adequate teaching materials, textbooks, language support or modern teaching methods. There were also very few opportunities for extracurricular activities, science education, and advanced learning. This led to a substantial educational disparity between plantation schools and schools in more developed parts of the country.

The underdevelopment of physical and pedagogical infrastructure was closely linked to the political and social marginalization of plantation Tamil communities after independence. Since many plantation Tamils became stateless and lost political representation, their educational needs received limited attention from policymakers. Consequently, plantation schools remained structurally disadvantaged within Sri Lanka's national education system. Therefore, although free education officially existed for all citizens, the absence of adequate educational infrastructure prevented plantation Tamil children from equally benefiting from the opportunities promised by the free education reforms.

Deliberate Limitations on Educational Investment and Upward Mobility

The most insidious dimension of how the lack of state protection influenced exclusion was the enforcement of an artificial ceiling on educational attainment. The state legal frameworks that regulated the plantation sector only mandated primary education up to Grade 5. Because these children were stateless, the government deliberately chose not to establish secondary classes (Grade 6 and above) or advanced secondary options (Ordinary and Advanced Levels) within the estate grid.

This structural limitation had a very specific economic function for both the state and the private plantation companies: Education was restricted to learning how to read and write . This meant that estate children could not take the competitive exams to enter the universities or get white collar jobs in the public sector . In effect, generations of youth were trapped in the geographical confines of the plantation, forced to follow their parents as cheap, compliant manual labour to sustain the island's main foreign exchange earner: the tea industry.

Conclusion

Post-independence Sri Lanka's historical trajectory presents a profound socio-political contradiction: a nascent democracy celebrating a globally lauded, egalitarian welfare state via Dr. C.W.W. Kannangara's Free Education Framework, whilst systematically sustaining a structural vacuum that excluded its most economically vital workforce. This research paper has shown that the educational exclusion of Up-Country Tamil plantation workers from the emancipatory reach of the 1943 reforms was neither an accidental byproduct of historical oversight nor a passive failure of implementation. It was rather a systemic, multi-dimensional deprivation, born at its core from a state-created statelessness through the Citizenship Act No. 18 of 1948. The state was insulated from its public obligations by effectively stripping this community of its legal and civil existence. This paved the way for a complex convergence of four major, interlocking dimensions that sustained the system of this educational exclusion. Thus, Political Marginalization, Geographic Isolation, Socio-Economic Poverty, Language, and Cultural Marginalization.

Ultimately, the study demonstrates that citizenship is the fundamental condition for the realization of all other socio-economic rights. With no legal recognition from the state, the rhetoric of "universal" free education became an exclusive privilege strictly for recognized citizens. For decades, plantation workers were excluded structurally. The use of legal frameworks to maintain colonial-style labor exploitation in the name of national sovereignty is a stark reminder of how a post-colonial nation-state can weaponize its legal frameworks. The Up-Country Tamil community's real educational equity was not just delayed through infrastructure; it was legally frozen until the state was finally forced to undergo the painful, decades-long process of nationalizing estate schools and restoring the fundamental human right of identity.

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Chapter 34 : Gendered Metamorphosis: Female and Male Transformations in Meitei Folklore through Western and Asian Literary Theories

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Abstract

Metamorphosis is a recurring motif in many mythological and folkloric traditions, often expressing social values and moral ideas. This paper examines gendered patterns of metamorphosis in selected Meitei folktales, focusing on stories such as Hayainu's transformation into a hornbill, Shanrembi's cycle of transformations, Kachenglaiba's transformation into the Uthum bird, and the hybrid figure of Keibu Keioiba. Using approaches from structuralism and feminist criticism alongside Asian ideas such as karmic morality and animistic cosmology, the study explores how transformation functions differently for male and female characters.The analysis shows a clear pattern: female metamorphosis often appears as a response to suffering or injustice and becomes a means of survival, renewal, or the restoration of moral order. In contrast, male metamorphosis tends to represent punishment and moral failure, often leading to degradation or monstrosity. These narratives suggest that Meitei folklore encodes a gendered moral framework in which transformation restores justice for wronged women while exposing the consequences of unethical behaviour in men.

Keywords: Meitei Folklore, Metamorphosis, Gender Studies, Structuralism, Mythology

1. Introduction

Metamorphosis, the transformation of a human being into another form of existence, has long served as a compelling narrative device through which cultures articulate ideas about morality, suffering, power, and transcendence. Across mythological traditions, transformation rarely occurs as a random marvel but emerges at moments of ethical crisis, emotional extremity, or supernatural intervention. In classical Western literature, the transformations described in Metamorphoses portray bodily change as the consequence of divine will, desire, or punishment (Ovid). Through such bodily transformations, moral meaning is expressed symbolically, allowing narratives to explore tensions between justice and transgression, human and nonhuman existence, and order and disorder (Barry 52).

Although metamorphosis has been widely studied in classical and comparative mythology, the folkloric traditions of Northeast India, particularly those of the Meitei people of Manipur remain relatively underexamined. Meitei oral narratives contain many stories in which humans transform into birds, animals, or hybrid beings. However, these transformations are not narratively neutral; they reveal a subtle gendered logic. Female metamorphosis often occurs in situations of injustice or suffering and functions as a means of survival, transcendence, or moral restoration. Male metamorphosis, by contrast, frequently signifies moral failure, pride, or social deviation, producing punitive or monstrous forms.

This paper explores this contrast through four Meitei folktales: Hayainu's transformation into a hornbill, Shanrembi's cycle of transformations and restoration, Kachenglaiba's transformation into the Uthum bird after confronting royal authority, and the hybrid existence of Keibu Keioiba. These narratives raise an important question: why do female transformations tend to produce regenerative outcomes while male transformations often lead to punishment or exile? By addressing this question, the study aims to illuminate the cultural logic underlying transformation in Meitei folklore and place these narratives within the broader comparative study of metamorphosis in world folklore.

2. Theoretical Framework

Interpreting metamorphosis in Meitei folklore requires a theoretical framework that addresses narrative structure, gender relations, and cultural cosmology. Transformations in these narratives are not simply imaginative devices but symbolic acts through which moral tensions, social hierarchies, and emotional experiences are expressed. To analyse the contrasting roles of female and male metamorphosis, this study combines Western literary theories with Asian philosophical perspectives. Such

an approach allows the narratives to be examined both as structured mythic texts and as expressions of indigenous cultural thought.

2.1 Western Theoretical Approaches

Structuralist theory, particularly the work of Structural Anthropology, proposes that myths operate through systems of binary oppositions that structure human understanding of the world (Lévi-Strauss 206). Within narrative traditions, transformation frequently functions as a mediating device that negotiates oppositions such as human and animal, culture and nature, purity and corruption (Lévi-Strauss 224). In Meitei folklore, metamorphosis symbolically bridges these categories, allowing characters to move between states of vulnerability and empowerment.

Feminist literary theory further illuminates the gendered dimension of transformation in folklore. Scholars observe that traditional narratives often encode women's experiences within patriarchal domestic structures characterised by marginalisation, jealousy, or violence (Guerin et al. 196). Within such contexts, metamorphosis may function as a symbolic form of agency, enabling female characters to preserve dignity or escape oppressive environments when direct resistance becomes impossible (Barry 122). The recurring motif of the bird-woman across global folklore traditions suggests that transformation can represent alternative forms of autonomy and self-preservation.

Psychoanalytic theory offers an additional perspective by interpreting metamorphosis as a symbolic expression of trauma and repression. Characters who endure prolonged suffering may undergo transformation as a narrative representation of psychological rupture, allowing internal distress to be externalised through bodily change.

2.2 Asian Interpretive Frameworks

Western approaches, however, must be complemented by perspectives rooted in Asian cosmology. In many South and Southeast Asian traditions, the concept of karma frames transformation as a reflection of moral consequence. Suffering endured unjustly may eventually lead to restoration, while wrongdoing results in punishment.

Equally significant is the animistic worldview prevalent in many indigenous traditions of Northeast India, where humans, animals, and spirits inhabit an interconnected environment. Within such a cosmology, transformation from human to animal does not necessarily signify degradation but may represent entry into another legitimate form of existence.

Indic and Buddhist ideas of cyclical rebirth further shape this logic. Metamorphosis may therefore be understood as a transitional state within a continuing moral process,

helping explain why female transformations in Meitei folklore often appear regenerative rather than destructive.

3. Female Metamorphosis: Escape, Memory, and Regeneration

In Meitei folklore, female metamorphosis frequently emerges not as a form of punishment but as a narrative response to injustice, suffering, and social vulnerability. Unlike many mythological traditions where transformation is imposed by divine authority, the metamorphoses associated with female characters often function as strategies of survival or as mechanisms through which moral truth eventually reasserts itself. Two narratives in particular the story of Hayainu and that of Shanrembi illustrate how transformation operates as a means of escape, remembrance, and regeneration. Hayainu's metamorphosis represents a decisive withdrawal from an oppressive human environment, whereas Shanrembi's transformations unfold as a cyclical process through which injustice is ultimately exposed and corrected.

3.1 Hayainu's Transformation into the Hornbill

The story of Hayainu, associated with the hornbill, presents one of the most poignant examples of metamorphosis in Meitei narrative tradition. Following the death of her biological mother, Hayainu is left under the care of a stepmother whose hostility gradually escalates into cruelty. The father's frequent absence intensifies the girl's vulnerability, leaving her without protection or emotional support. Despite her diligence in performing domestic tasks, Hayainu is repeatedly beaten and humiliated, her efforts never sufficient to satisfy the stepmother's resentment.

At the height of her despair, Hayainu experiences a dream in which her deceased mother appears and offers guidance. The dream instructs her to visit a lake where hornbills gather and request feathers from them. By collecting and sewing these feathers onto her body, she gains the ability to join the birds and leave the human world behind. Following these instructions, Hayainu approaches the flock of hornbills, who respond with compassion and provide the feathers necessary for the transformation. When the birds finally take flight, they lift her into the air, and she becomes one among them, departing permanently from the environment that had caused her suffering.

This transformation carries significant symbolic meaning. It functions unmistakably as an act of escape. Unlike male transformations in Meitei folklore, which often arise from wrongdoing or arrogance, Hayainu's metamorphosis occurs as a response to prolonged injustice. The transformation therefore represents liberation from domestic violence.

Another important aspect of the story lies in the role of maternal guidance. The deceased mother's appearance in the dream serves as a mediating moment between the human and nonhuman realms. Through the dream, maternal care transcends death, enabling the daughter to access a path of survival that would otherwise remain unknown.

Equally significant is the motif of feminine solidarity embodied by the hornbills. The birds respond sympathetically to Hayainu's suffering, providing the feathers that enable her transformation. Their compassion contrasts with the cruelty of the stepmother, suggesting that the natural world possesses a moral sensitivity absent from certain human relationships.

From a feminist perspective, Hayainu's transformation into a hornbill may be interpreted as a form of symbolic agency that allows escape from domestic oppression (Barry 128). When direct resistance is impossible, metamorphosis provides an alternative mode of survival that preserves dignity. A structuralist reading further reveals the opposition between the violent domestic environment and the liberating natural world, symbolically mediating the tension between suffering and freedom (Lévi-Strauss 229).

3.2 Shanrembi's Multiple Transformations

While Hayainu's transformation marks a permanent departure from the human world, the narrative of Shanrembi presents a more intricate sequence of metamorphoses. The story begins with the violent death of Shanrembi's mother, who is murdered through deception by a jealous rival. After being thrown into a lake, the mother's spirit transforms into a turtle, initiating the first phase of transformation.

The turtle symbolises survival and concealment. Dwelling beneath the water's surface, it represents a hidden continuation of life after apparent death. Through dreams, the mother communicates with her daughter, revealing the truth of the crime and instructing Shanrembi on how she might restore her to human form. The attempt fails when the stepmother and stepsister intervene, forcing Shanrembi to cook the turtle.

Later in the narrative, Shanrembi herself becomes the victim of treachery. Having married a prince, she is lured back to her childhood home by her stepmother and stepsister and murdered through deception. Death, however, does not end her presence within the story. Her spirit transforms into a pigeon that communicates with the outside world and reveals the truth of her fate.

The pigeon stage is significant because it establishes the bird as a messenger between worlds. In many cultural traditions, birds function as intermediaries capable of moving between the earth and the sky, the living and the dead.

The final stage of transformation occurs when the remains of the pigeon give rise to a fruit-bearing plant. The fruit eventually transforms back into Shanrembi in human form, enabling her to return and reclaim her rightful place. This transformation introduces symbolism related to fertility, regeneration, and the cyclical renewal of life. The plant metaphor suggests that moral truth may lie dormant for a time but will ultimately emerge.

Taken together, Shanrembi's repeated transformations illustrate how narrative metamorphosis can function as a mechanism through which memory survives violence and truth resists erasure. Literary critics note that mythic transformation frequently operates to restore disrupted moral order, ensuring that injustice is eventually revealed (Guerin et al. 204). Through successive metamorphoses, Shanrembi's presence persists across boundaries of life and form until justice is re-established.

4. Male Metamorphosis: Punishment and Monstrosity

If the metamorphoses experienced by female figures in Meitei folklore often carry connotations of escape, resilience, or regeneration, the transformations associated with male characters operate within a markedly different narrative logic. In many cases, male metamorphosis functions as a moral warning rather than a redemptive possibility. Instead of offering liberation from suffering, transformation becomes a consequence of ethical failure, arrogance, or social irresponsibility. Two stories illustrate this pattern clearly: the tale of Kachenglaiba, who becomes the Uthum bird, and the legend of Keibu Keioiba, the human–tiger hybrid.

4.1 Kachenglaiba's Transformation into the Uthum Bird

The story of Kachenglaiba presents one of the most explicitly moralistic examples of transformation in Meitei folklore. Kachenglaiba is introduced as a poor man who travels to attend a communal feast organised by a king during a ceremonial observance. At the gathering, he is ignored and humiliated when no serving leaf is prepared for him. Offended by this slight, he rebukes the king publicly, accusing him of failing to ensure that every guest receives food. His protest is soon followed by fear as he realises the danger of confronting royal authority so openly. Anticipating punishment, he flees the gathering and hides near a fish pond for the night. There he undergoes a strange transformation, assuming the form of a bird known as the Uthum Thumbicha.

When his wife eventually finds him in this altered state, her reaction reveals the moral judgement embedded in the narrative. Rather than expressing sympathy, she condemns his behaviour, accusing him of cowardice and irresponsibility. In anger, she declares that he should remain in that form forever and spend his days crying out at dawn. From that moment onward, Kachenglaiba lives as the Uthum bird, uttering the characteristic "tum–tum" call each morning.

This transformation differs fundamentally from the metamorphoses experienced by female protagonists such as Hayainu or Shanrembi. Whereas their transformations arise from conditions of victimisation, Kachenglaiba's change is framed as the consequence of his own actions.

First, the narrative emphasises cowardice. Although Kachenglaiba initially demonstrates courage by challenging the king, his immediate flight undermines this act of protest. His inability to face the consequences of his words becomes the central moral failure that defines his character.

Second, the condemnation voiced by his wife situates the transformation within a social context, suggesting that moral responsibility extends beyond the individual to the family and community.

Finally, the permanence of the transformation reinforces its punitive function. Unlike the cyclical metamorphoses seen in female-centred narratives, Kachenglaiba's change is irreversible. His daily cry at dawn becomes a reminder of the consequences of reckless speech combined with cowardice.

From the perspective of Asian moral cosmology, this transformation may be interpreted as a didactic punishment, communicating a lesson about humility, responsibility, and the dangers of impulsive confrontation with authority (Ovid).

4.2 Keibu Keioiba: The Hybrid Monster

An even more dramatic example of male metamorphosis appears in the legend of Keibu Keioiba, a figure prominent in Meitei mythological imagination. Unlike Kachenglaiba, whose transformation occurs suddenly, Keibu Keioiba's altered form arises from deliberate misuse of supernatural power. According to the legend, he was originally a priest possessing considerable ritual knowledge. Through dangerous magical practices, he attempted to transform himself into a tiger. The attempt proved disastrous: instead of achieving a controlled transformation, he became trapped in a monstrous hybrid state, possessing the head of a tiger and the body of a human.

This incomplete transformation symbolises the consequences of pride and the reckless pursuit of power. By attempting to manipulate forces beyond human control, the priest violates the balance between the human and spiritual worlds. The resulting hybrid form marks his fall from respected ritual specialist to feared predator.

Several symbolic elements define this transformation. Pride is the most evident, as Keibu Keioiba's desire for extraordinary power leads him to overstep the limits imposed by tradition and morality. Closely related to this pride is the abuse of supernatural knowledge. In many traditional societies, ritual specialists occupy positions of responsibility because their knowledge connects them with invisible forces; when such knowledge is misused, the consequences are often portrayed in myth as catastrophic transformations.

The third element is monstrous hybridity. Keibu Keioiba's body embodies the collapse of boundaries between the human and animal realms. Yet unlike the harmonious transformations associated with female protagonists, his hybrid state signals disorder. The tiger head symbolises predatory instinct and violence, while the human body remains as a reminder of the identity he has lost.

From a gendered perspective, this transformation highlights a striking contrast with the female narratives discussed earlier. Female characters who become birds enter into a relationship of harmony with the natural world, whereas Keibu Keioiba's metamorphosis represents a rupture in that order.

A structuralist interpretation further clarifies this contrast. Female metamorphosis mediates the opposition between culture and nature by allowing the heroine to find refuge within the natural world. Male metamorphosis, however, disrupts this balance by violating the boundary itself. The hybrid monster becomes a symbol of imbalance-neither fully human nor fully animal.

Ultimately, the story concludes with the destruction of Keibu Keioiba, reaffirming the principle that power pursued without moral restraint leads to ruin. Through this narrative, metamorphosis becomes a representation of the consequences of hubris and the collapse of ethical order.

5. Comparative Analysis: Gendered Patterns of Transformation

When the narratives examined in the preceding sections are considered together, a clear pattern emerges regarding the symbolic function of metamorphosis in Meitei folklore. Although transformation is a shared narrative motif across these stories, the circumstances that produce it, the meanings it carries, and the outcomes it generates differ significantly depending on the gender of the character involved. Female and

male metamorphoses therefore embody distinct moral and cultural logics that shape the role of transformation within these tales.

In the case of female characters, metamorphosis typically arises from conditions of oppression, injustice, or emotional suffering. The transformations of Hayainu and Shanrembi occur in contexts where the protagonists are subjected to cruelty or betrayal within their own households. Hayainu endures persistent abuse at the hands of her stepmother, while Shanrembi experiences both the murder of her mother and later her own betrayal and death. In these situations, metamorphosis functions not as a consequence of wrongdoing but as a response to victimisation, becoming a means of preserving dignity, escaping violence, or restoring justice.

The narrative function of female metamorphosis is therefore largely regenerative. Hayainu's transformation into a hornbill allows her to leave behind a domestic environment that has become intolerable. By entering the world of birds, she achieves a form of freedom denied to her within the human world. Shanrembi's experience, although more complex, follows a similarly restorative trajectory. Her successive transformations- from spirit to pigeon and finally back to human form enable her to reveal the truth about her murder and reclaim her rightful position. In both narratives, metamorphosis becomes a vehicle through which moral order is eventually re-established.

Another important feature of female transformation is its relationship with nature. When female protagonists assume nonhuman forms, they tend to enter into a harmonious relationship with the natural world. Birds and other natural elements respond sympathetically to their suffering, providing refuge or acting as intermediaries that help restore justice. Nature thus functions as a moral ally that shelters the innocent and preserves their voices even after death.

The pattern observed in male metamorphosis differs sharply from this model. The transformations of Kachenglaiba and Keibu Keioiba arise not from victimisation but from moral failure. Kachenglaiba's change into the Uthum bird follows reckless defiance combined with cowardice, while Keibu Keioiba's monstrous form results from pride and the misuse of supernatural power. In both cases, transformation is directly linked to the character's actions and serves as a consequence of ethical transgression.

The function of male metamorphosis is therefore predominantly punitive. Kachenglaiba's existence as a bird becomes a reminder of his irresponsibility and weakness, imposing a form of social exile symbolised by his cry at dawn. Keibu Keioiba's case is even more extreme: his attempt to harness supernatural power leads

to a grotesque hybrid form that isolates him from human society and ultimately results in his destruction. Transformation thus becomes a narrative warning against arrogance and moral excess.

Equally striking is the different relationship between male transformation and the natural world. Whereas female characters often find refuge within nature, male characters who assume animal forms become figures of disorder or monstrosity. Keibu Keioiba's tiger-headed body represents a violation of the natural boundary between species rather than a harmonious integration with it.

Taken together, these narratives reveal a broader cultural pattern within Meitei folklore. Female metamorphosis tends to be regenerative, enabling characters to escape suffering or return to reclaim justice. Male metamorphosis, by contrast, is largely degenerative, marking the consequences of pride, cowardice, or the misuse of power. Through this contrast, the stories express sympathy toward women who endure injustice while condemning forms of male moral failure that disrupt social harmony.

Comparative literary criticism suggests that mythic narratives frequently employ symbolic transformation as a way of resolving social tensions and reasserting ethical order (Guerin et al. 189). Feminist criticism further emphasises that differences in the narrative treatment of male and female characters often reflect culturally constructed expectations regarding morality and behaviour (Barry 130).

Conclusion

Metamorphosis in Meitei folklore functions not simply as a fantastical narrative element but as a symbolic mechanism through which moral and cultural values are expressed. The stories of Hayainu, Shanrembi, Kachenglaiba, and Keibu Keioiba reveal a clear gendered pattern in the meaning of transformation. Female metamorphosis generally arises from experiences of injustice, suffering, or betrayal, and becomes a means of escape, endurance, and eventual restoration of moral order. Through transformation, characters such as Hayainu and Shanrembi are able to preserve dignity and ultimately reclaim justice. Male metamorphosis, however, tends to emerge from moral failure, pride, or the misuse of power. In these cases, transformation functions as punishment, leading to degradation, exile, or destruction. Together, these narratives suggest that metamorphosis in Meitei folklore encodes a gendered moral logic in which female transformation is regenerative while male transformation exposes the consequences of ethical transgression.

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Chapter 35 :Women Body and Women Self: A Study of Eimear McBride's *A Girl is a Half- formed Thing* and Nawal El Saadawi's *Woman at Point Zero*

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Abstract
The subjugation of women has been a persistent and pervasive feature of human societies across historical epochs, manifesting in diverse forms shaped by cultural, racial, and geopolitical contexts. Despite such variations, one fundamental and universal mechanism underpinning women's oppression is sexual violence. Sexuality, within patriarchal frameworks, has frequently been constructed to privilege male desire, thereby relegating women to the status of objects intended for gratification, stripped of agency, subjectivity, and emotional autonomy. Consequently, sexual violence has been normalized and institutionalized as an intrinsic component of social structures across civilizations. This spectrum of violence encompasses practices such as marital rape, molestation, sexual assault, eve teasing, enforced prostitution, and rape, all of which exert devastating consequences on women's physical, psychological, and existential well-being. The repercussions often include profound trauma, erosion of self-worth, fragmentation of identity, social alienation, and enduring health complications. This study undertakes a comparative analysis of two seminal literary works: A Girl is a Half-Formed Thing by Eimear McBride and Woman at Point Zero by Nawal El Saadawi. Set within the distinct sociocultural landscapes of Ireland and Egypt, these narratives illuminate the lived experiences of their respective female protagonists, whose lives are marked by pervasive sexual violence and systemic marginalization. By interrogating these texts, the present paper seeks to elucidate how women's bodies are appropriated as instruments of domination within patriarchal societies, functioning as sites upon which power is inscribed and exercised. Furthermore, it draws cross-cultural parallels to underscore the shared modalities of female objectification and suffering, despite divergent cultural milieus. Ultimately, the study explores how the protagonists negotiate, resist, and ultimately transcend these oppressive structures, thereby articulating pathways toward self- realization and emancipation.
Keywords: Sexual violence, Patriarchy, Female subjugation, Trauma, Identity fragmentation, Cross-cultural analysis.

1. Introduction

Women are often considered to be secondary sex to their male counterparts. This women subjugation is not a new thing but has been there for ages. But now women across the globe are fighting against this domination to achieve their emancipation. Every year new rules and laws are formulated by UNESCO and UNO to stop the violence against women but unfortunately, it keeps on increasing only. Everyday newspapers are filled with the news of women molestation, eve teasing,and rapes etc. The UN Women in their article entitled *Ending Violence Against Women* argues that violence against women is the violence against all human rights and it should be ended as soon as possible. Violence against women and girls is a grave violation of human rights. Its impact ranges from immediate to long term multiple physical, sexual and mental consequences for women and girls, including death (UN Women, 2015*)*. World Health Organisation in a factsheet entitled *Violence against Women*, talks about the women harassment at the global level. It argues that:

> A 2013 analysis conduct by Who with the London school of Hygiene and Tropical Medicine and the South Africa Medical Research Council, used existing data from over 80 countries and found that worldwide, 1 in 3, or (35%), of women have experienced physical and/ or sexual violence by an intimate partner or non-partner sexual violence. (WHO, 2017*)*

Michelle Obama gave a speech in New Hampshire on 14thOctober 2016 when she was supporting Hillary Clinton for the candidacy of US president, which is considered to be a milestone for feminism. She focused on women harassment and argued that it is not a myth but the true reality of the society which is still prevalent.

> We thought all of that was ancient history, didn't we? And so many have worked for so many years to end this kind of violence and abuse and disrespect, but here we are in 2016 and we're hearing these exact same things everyday on the campaign trail. We are drowning in it. (The Guardian, 2016*)*

She expressed that this women molestation has not ended and everybody is just drowning in it. She asks women to realize their importance and work for their emancipation.

Although existing feminist and postcolonial scholarship has extensively examined women's oppression within individual national and cultural frameworks, there remains a significant paucity of comparative transnational studies that critically investigate the intersection of sexuality, gendered suffering, and socio-cultural resistance across divergent geopolitical locations such as Ireland and Egypt. Current research predominantly treats these societies in isolation, thereby overlooking the ways in which culturally embedded discourses of sexuality and tradition simultaneously produce distinct yet comparable forms of female marginalization. Consequently,

insufficient scholarly attention has been devoted to understanding how women negotiate agency, bodily autonomy, and identity formation within contrasting religious, historical, and patriarchal structures. This study seeks to address this lacuna by offering a comparative feminist analysis of women's struggles in Irish and Egyptian contexts through the lens of sexuality and socio-cultural conditioning.

2. Research Methodology

The present study is grounded in an interdisciplinary and comparative feminist methodological framework that interrogates the intersections of gender, sexuality, power, and identity within the selected literary texts. Adopting a qualitative and interpretative mode of inquiry, the research draws extensively upon the theoretical paradigms of Feminist Literary Criticism, Postcolonial Feminism, Gender Theory, and Psychoanalytic Feminism to examine the systemic structures of patriarchal domination that circumscribe female subjectivity across divergent socio-cultural contexts.

Methodologically, the study employs a comparative textual and discourse-oriented analysis to explore the convergences and divergences in the representation of women's oppression in Irish and Egyptian societies. Through rigorous close reading, the research investigates the manner in which female bodies and sexualities are discursively constructed, regulated, and commodified within patriarchal frameworks. The analysis further interrogates how the protagonists negotiate agency within hegemonic social structures that continually reduce women to objects of desire, surveillance, and ideological control.

The theoretical foundation of the study is substantially informed by the feminist philosophy of -Simone de Beauvoir, particularly her conceptualization of woman as the "Other," which elucidates the processes through which patriarchal societies institutionalize female marginalization and existential dependence. The study also engages with Judith Butler's theory of gender performativity to examine the socially constructed and performative dimensions of femininity and sexuality. In addition, the postcolonial feminist interventions of Gayatri Chakravorty Spivak provide a critical lens through which the silencing, erasure, and sub-alternization of women may be interpreted within culturally stratified power structures.

Moreover, the study adopts a transnational feminist perspective to foreground the universality of patriarchal oppression while simultaneously recognizing the culturally specific manifestations of gendered violence and subjugation. By juxtaposing the lived experiences of women situated within the distinct geopolitical and cultural terrains of Ireland and Egypt, the research destabilizes reductive binaries between East and West and instead reveals the pervasive continuity of patriarchal ideologies across national boundaries.

Ultimately, this theoretical methodology facilitates a multilayered exploration of female subjectivity, demonstrating how sexuality operates simultaneously as a locus of oppression, resistance, alienation, and identity formation. The interdisciplinary synthesis of feminist, postcolonial, psychoanalytic, and discourse-theoretical

approaches thus enable a more nuanced and critically expansive understanding of women's existential struggles within patriarchal societies.

3. A Girl is a Half-Formed Thing

A Girl is Half-formed Thing is written by the Irish author Eimear McBride, whose work brought her considerable recognition and critical acclaim in contemporary literature. As her debut novel, the book experienced a long and difficult journey to publication, taking almost nine years before it was finally published. The novel primarily explores the theme of female sexuality as a social taboo and portrays the struggles faced by its unnamed female protagonist in confronting this reality. Through an intense stream-of-consciousness narrative style, the text provides readers with deep insight into the protagonist's mind and emotional world. Her journey is marked by suffering, psychological turmoil, alienation, and inner conflict, reflecting the oppressive social structures that shape and restrict female identity and sexuality.

According to Ron Charles, "It's a staggering emotional ordeal that draws us into the world of a woman forced to endure a knife drawer of horrors that would slice up anyone's sanity" (Charles, 2014).

Charles Thaxton reviews,

> The book deals graphically with the spectrum of childhood and sexual abuse in Ireland, specifically that targeted a woman. Words quickly become a bodily matter. McBride has claimed something important by writing "Girl" the way that she did. Language is never truly ambient or innocuous; it is always particular, always physical, never without consequence. (Thaxton, 2014*)*

These critical perspectives suggest that the novel portrays the protagonist's painful transition from girlhood to womanhood within a patriarchal society that compels her to internalize the belief that a woman is merely a "half-formed" being. As the narrative progresses, the protagonist becomes entangled in a series of disturbing and emotionally complex sexual experiences that gradually fracture her sense of self and destabilize her identity. The novel powerfully illustrates how deeply ingrained patriarchal values condition women to perceive themselves as inferior and incomplete, thereby fostering feelings of alienation, vulnerability, and self-negation. Consequently, the protagonist remains trapped in an unending quest for recognition, emotional affirmation, and personal autonomy within a social structure that continuously suppresses her individuality and denies her a coherent sense of selfhood.

The protagonist got raped by her uncle-in-law when she was only thirteen years of age and hardly knew the meaning of sex. He uncle came to her house along with her aunt and started seducing her. As the narrator was from a Catholic family, so she was aware that it was a mortal sin to get seduced by her uncle. She was just a small girl living in fantasies and imagination but she tried to ignore all the advances in all ways possible but her uncle was not ready to give up. He continued seducing her and one day when he found that his wife and narrator's mother were not at home went to

her. She resisted his advances and started sweating. He went close to her and kissed her. She said, “Don’t do that to me. I. Feel. I might being to cry or sink or fall” (McBride, 2013, p.53). But he didn’t stop and continued to molest her. She ran into the lake nearby and took a dip into it to baptize her so that he sins should be forgiven. She was so innocent that she thought it was all her fault and wanted to get out of that sin. This molestation changed her totally. She started to think about her sexuality in different way. She didn’t want to do that with her uncle but he had introduced her to a different world. “And I do not. Do not need. Have something else I need to do. There’ll others. Some others. Some day more who want me I want to fuck them too. Thanks uncle for sage introduce” (McBride, 2013, p.57).

Her uncle continued to molest her and one day came to her room and finally raped her in most savage way possible. “I cannotcannot take this pain. Pain. Scratch him. Pain of it. Keep clawing at his skin. He does not. Does not know this. He is digging into me and me to him. He’s. Push it home as far up. In that tight spot. He is. I will feel it bruising pains” (McBride, 2013, p.58).

She was in so much pain that she scratched his face but nothing could stop his uncle and his sexual desire. This thing completely changed her life and she started feeling alienated and inferior. She could not discuss this with her mother as she felt that it was her fault. But now she does not want men to chase her instead she wanted to chase them down so that they could not hurt her. But this incident haunted her a lot. When she was 15 years of age, she made a friend at school and she started having sex with the school boys as the source of liberating herself. She didn’t want boys to do it to her but instead, she asked it from boys. But this sex never gave her pleasure, it was only a thing to liberate her. “He came too sat beside. Put his arm around my waist. I push that off. What are you doing? Am I your wife” (McBride, 2013, p.70).

She had realized that saying no to boys would hurt her and saying yes would elevate her. “Offer up to me and disconcerted by my luck of saying no. Saying yes is the best of powers. It’s no big thing the things they do” (McBride, 2013, p.71). She kept on sleeping with boys. Deep inside she was all lonely. She loved her brother who was suffering from cancer could not help or understand her. Her mother was always after her son and hardly cared about her daughter’s need. She was all helpless and lonely but this sex kind of gave her power and liberated her. As she was neglected at home, she decided to go to the city and start her life there and stop doing sex. But in the city, she felt lonely and home sick. She finally made a friend and went to bard with her. She started drinking and smoking and adapted the ways of city life. One day when she went to the pub with her friend, they drank a lot and a man took her to his home. When she woke up in the morning, she didn’t know who she was sleeping next to or what she has done with that man. “What have I begun or ended? What I’ve done. Sex as. Go to mass. Confession. And I thought I would not this again, as it is the same as? . . . No. Stop” (McBride, 2013, p. 88). After this incident, she again fell into the trap of

sex which liberated her from the bondage of loneliness and control. She along with her friend started hunting men and did sex with them. But she felt no pleasure in sex.

> I met a man. I met a man. I let him throw me round the bed. And smoked, me spliffs and choked my neck until I say I was dead. . . I met a man with condoms in his pockets. Don't use them. He loves children in his heart. . . I met a man who was a priest. I didn't I did. Just as well as many another one would. . . I met a man who hit me a smack. I met a man who cracked my arm. . . I met a man and many more and I didn't know you at all. (McBride, 2013, p.97)

She was living a life having no meaning but at least it was giving her strength to cope up with loneliness. But the dark side of her past came back into her life. Her grandfather died and she went to her grandparent's house. There she met the person who molested her the most and changed her life. After so many years also, her uncle didn't change his feelings for her and tried to seduce her again. He took her to the hill and in the car started molested her. He started kissing her which choked and suffocated her.

> Your mouth. Hurts me. Too swoll he says. You're sensitive to that I remember from before. God. Be quiet. Just for a moment. Sit. Alright. Sit Alright. Are you alright? He take my hand. I. am. Shake. There. Calm down. We're going to be. I know. We are going to be fine. We should. What? We are not we. Go back. Now. Alright. Alright. Start the car now. (McBride, 2013, p.108)

This statement by the narrator shows that how much she resisted to his advances and was not interested in all this. The hypocrisy of her uncle lied in the fact that his daughter was older than the narrator. The narrator was so ashamed of all this and again went to the lake to baptize her as she considers herself the culprit for this entire situation. But her uncle took her number and contacted her once she was in the city. He called her and went to her apartment and used to do sexual intercourse with her. This was a very crucial time for her as her brother was in the hospital lying on his deathbed. He loved her brother the most in the world and he was going away from her life. She was very lonely and sad as her father had also abandoned them in their childhood only. The presence of uncle in her life was giving her strength to cope up with this harsh situation but her uncle was just using her to satisfy his sexual hunger. And the pain caused by her uncle during the sexual intercourse relieved her to forget the pain caused to her by the sufferings of her brother. "I want you. There is something. I say Don't leave me alone. There is something going on in my. Please don't stop I say and again. Til I am hurt or I am sick. Keep going until I. Then you can let me die" (McBride, 2013, p.132).

In an article entitled "*I AM Not that Girl": Disturbance, Creativity, Play, Echoes, Liminality, Self Reflection and Stream of Consciousness in Eimear McBride's A Girl is a Half-formed Thing*, Gina Wisker discusses the plight of the narrator. She

argues that the narrator throughout her life lived in a state of neglection and is always ignored. She wants to be known and famous and finds out that her sexuality can make her famous and acknowledged. So, he carried out a relationship with this uncle and other men who abused her. She states:

> . . . her response is that of a victim whose identity becomes defined by the act, so that she seeks him out and seeks other abusive relationships, some more violent. It is downhill journey for the girl and one which is predicated upon confusions generated by her own subordinate position, and her desperate need to be seen, singled out and loved. (Rose, 2013, p.59)

But when her brother died, she was broken and devastated. She felt as if God has given her the punishment of her sins by taking away her brother. She decided to stop all this and live a peaceful life to penance for her sins. But her uncle didn't stop molesting her.

> He rip me open and hurt because I say though I don't want, he beg. No that's all I ask. . . when he kisses. I am. Strangle. And he pushes me down. Something flooding . . . slaps my face. . . So he hit til I fall over. Crushing under. Hits again. He his til something's click and the blood begins to run. Jesus he says. I feel sick. But I'm rush with feeling. Wide and. He thinks he's bad when he fucks me now. (McBride, 2013, p.144)

This is how her uncle treated her when she stopped him from molesting her. She was helpless and could do nothing about it. She was all alone in this fight. Her uncle had started to take her as his property and didn't like if anybody else would touch her. Once, in a jungle when one boy approached her, he came and got into a fight with that boy and took her with her and molested her in the car again. And the day when her brother dies, she was very sad and went into the jungle and that boy came and started beating her and raped her brutally. She was all torn and when she came back home, her uncle went to the washroom and molested her there also. This was the hypocrisy of her uncle which completely ruined her life and gave her a life having no meaning. She was dejected from everywhere and was not able to understand things.

She simply went to that lake and drowned herself so as to leave this world and go a world which would not use her body or sexuality.

> Bubble from my mouth drift high. Blue tinge lips. Floating hair. Air famished eyes. Brown water turning into light. There now. There now. That just was life. and now.
> What?
> My name is gone. (McBride, 2013, p.203)

Gina Wisker in her article entitled "*I Am Not that Girl": Disturbance, Creativity, Play, Echoes, Liminality, Self Reflection and Stream of Consciousness in Eimear McBride's A Girl is a Half-formed Thing* sum-ups beautifully the character of

the unnamed narrator and defines her character as a result of the nature and the society and states:

> But the girl, as a young teenager, is also a victim of popular cultural insistences that she be sexually available that she defines herself by the power her use of sex gives her. Her many, increasingly abusive encounters with boys at school, then adult men, enact the downward spiral in which she is thrown. She believes her sexual ability provides her with status, and a sense of solidity and worth in the world. But from being desired by some what confused teenager, she is increasingly undervalued and physically abused. (Wisker, 2015, p.75)

Timothy Aubry in his review entitled *Eimear McBride's A Girl is a Half-formed Thing* also gives an apt description of the narrator's plight y stating that her character was definitely the outcome of the society. He did not blame the narrator and is on her side. He states that, "The book's narrator is not to blame for her skewed perspective: she is obviously the victim of an environment hostile to a young girl's healthy psychological development, a central component of which is her criminally sleazy uncle-in-law" (Aubry, 2014*).*

4. Woman at Point Zero

Woman at Point Zero by Nawal El Saadawi constitutes a seminal feminist discourse that interrogates the institutionalized subjugation, commodification, and epistemic silencing of women within a deeply entrenched patriarchal framework. The narrative revolves around Firdaus, a protagonist modeled upon a real-life prisoner whom Saadawi encountered during her empirical investigation into the psychological conditions of female inmates in a Cairo prison. Convicted of murder and sentenced to capital punishment, Firdaus emerges as a profoundly paradoxical figure whose refusal to appeal for clemency or mitigation of her sentence becomes emblematic of her radical repudiation of a socio-cultural order predicated upon gendered oppression and existential disenfranchisement. Her acceptance of death is not merely an act of resignation but a subversive assertion of agency against hegemonic structures that have persistently denied her subjectivity and autonomy.

Firdaus is initially represented as an ordinary young woman endowed with aspirations for self-realization, intellectual emancipation, and socio-economic mobility. However, her trajectory is relentlessly circumscribed by patriarchal institutions that perpetuate systemic violence, sexual exploitation, and psychological alienation. Subjected to multifarious forms of oppression throughout her life, Firdaus becomes emblematic of the existential predicament of women whose identities are constructed and regulated through mechanisms of male domination and socio-cultural coercion. The novel meticulously delineates the intersectionality of gender, class, sexuality, and power, exposing the ways in which patriarchal ideology normalizes female suffering while simultaneously depriving women of agency, dignity, and self-determination.

Through Firdaus's testimonial narrative, Saadawi articulates a scathing critique of androcentric social structures and the ideological apparatuses that sustain female marginalization. The text transcends the boundaries of individual experience and evolves into a broader socio-political indictment of institutionalized patriarchy, wherein women are rendered objects of consumption, control, and silencing. Consequently, the novel occupies a significant position within feminist literary discourse, functioning both as a counter-hegemonic narrative of resistance and as a profound exploration of the psychological ramifications of systemic gender oppression.

Sexual harassment is a widely known issue which is prevalent across the globe. In Egypt as well, sexual harassment done to the women is quite common. In Al-Monitor Magazine, Alaa Al Aswany published an article entitled *Sexual Harassment in Egypt: Women are People, Too* where she criticized the society for not taking this issue seriously. She argues that women in Egypt are considered only as sex toys used by the men till they get devastated or destroyed. She considers women to be important as they constitute one half of the society. She criticizes all the men who sexually assault their wives and other women to satisfy their sexual hunger.

> It is the disease of reducing women to her body and taking no interest in her feelings, her mind or her capacity as a human being. It is a disease of viewing a woman as a means of pleasuring men, whether acquired through a marriage contract or illicitly enjoyed by groping in crowed places. (Aswany, 2012*)*

In another article entitled *Closet full of Dreams: Inside Egypt's Sexual Harassment Crises,* Jen Tse explores that 99.3% of the Egyptian women are sexually harassed in their lives according to the UN, 2013.

Firdaus in her life was first sexually assaulted by her uncle when she was only a child and could hardly understand the meaning of sex. She had to knead the dough at home and for that, she used to sit down on the floor with the dress between her legs which used to slip to her thighs. ". . . I paid no attention until the moment when I would glimpse my uncle's hand moving slowly from behind the book he was reading to touch my leg. The next moment I could feel it traveling
up my thigh with cautions, stealthy, trembling moment" (Saadawi, 2007, p.13). The hypocrisy of her uncle lied in the fact that he used to hide his face behind the newspaper and press his hands between her thighs and that too brutally. Uncle is usually a fatherly figure but what he was doing to Firdaus was completely opposite. He should have maintained the dignity of his relationship with Firdaus who was just a small girl but he molested her just to get pleasure.

Firdaus was next sexually assaulted by her husband. Husband is often considered to be the protector of his wife who guards her honor and dignity till death. But it is mostly found that in many cases the husband assaults her wife in the form of marital rape. Same happened to Firdaus whose husband treated her no less than a pleasure machine. He used to do rough sex with her without caring about her feelings.

And often in such cases, women consider them only a bed partner to their husbands who have no right to enjoy any kind of sexual pleasure and instead should be submissive all the time to their husbands. Luce Irigaray in her essay *This Sex Which is Not One* is against this notion and criticizes the society for making women believe that sex is only meant for men. She boldly argues that it is not theonly penis which has the right to get pleasure. She urges to women that they equally deserve the sexual pleasure and should demand it. She wants to end the belief that women are merely the aid for men to achieve the pleasure. "Woman, in their sexual imaginary, is only a more or less obliging prop for the enactment of men's fantasies" (Irigaray, 1985, p. 23).

The sexual violence done to the women by their husbands leave not only a physical harm but a mental harm as well. The women start developing an inferiority complex and consider themselves low which ultimately results in the loss of identity. Firdaus was also taking all the torture of sexual and domestic violence. But she was not like other Egyptian women and ran away from her husband's house and met her third assaulter named Bayoumi.

Bayoumi was the man whom she met in the café after running away from her husband's house who promised her to give her a job and took her to his house. He made her believe that he loved her and developed sexual intercourse with her. But when she started asking about the job, she used to beat her and used to lock her in the house. Every night he used to come in dark and do sexual intercourse with her but one day she realized that the weight of the body was heavier, so she asked him who he was. He replied that how does it matter to her and abused her and raped her brutally. "He sank his teeth into the flesh of my shoulder and bit me several times in the breast, and then over my belly. While he was biting me, he kept on repeating: Slut, bitch" (Saadawi, 2007, p.53). So, basically, Bayoumi was selling her every night and making money out of her without even telling her. Firdaus came to know but she could not do anything. She was helpless as he used to lock her all day and at night men would come and tear her body to satisfy their sexual hunger. Bayoumi made her prostitute but finally one day she ran out of that house with the help of a neighbor.

She kept on running until she reached the shore of river Nile. She sat there on the bench and met a woman named Sharifa. Sharifa looked like an aristocratic women wearing the best of the clothes and the makeup. Sharifa asked Firdaus who did that to her and took random names. In those names, she took the name of Bayoumi and Firdaus got so confused. Sharifa told her that all men are same but a woman should know the value of her body. Sharifa took Firdaus to her apartment. Firdaus got bewitched with Sharifa and her status and wanted to be free and independent like her. But in reality, Sharifa was being nice to her only because she wanted to make money out of Firdaus and made her a high-class prostitute. Every hour men would come and Firdaus had to please them. "There were so many of them. I did not understand where they could possibly have come from" (Saadawi, 2007, p.61). Firdaus was not able to understand what was happening to her and all day she has to be in her room and men

would come. She was not enjoying it at all and asked Sharifa about it. Sharifa told her that it was business and there was nothing to get pleasure out of it. She brainwashed her that the only pleasure in life was to wear good clothes and eat good food. Firdaus had nobody to go back to, so she kept on doing what Sharifa was telling her even though she didn't like it. She was going deep into the quagmire of prostitution. But Sharifa didn't give her any money. One day a man named Fawzy came and told Firdaus that Sharifa was only making money out of her and she should not stay with her. Firdaus finally ran away from that place at night.

As she was walking across the street at night time, a policeman came and forced her to come with him. She resisted his advances and showed him her secondary school certificate. But he asked her that he will pay her and when she totally resisted him then, he started blackmailing her that he would put her behind bars for being prostitute. This is the hypocrisy of the society. The police who are considered to protect the honor of the citizens especially the women but here it was doing a completely different thing. "To clean up the country, and protect respectable families from the likes of you" (Saadawi, 2007, p.67). This statement shows the hypocrisy of the policeman. And finally, by force, he took her to her room and raped her brutally without even paying her which he promised to do. These are the double standards of the society that even if a girl wants to come out of this quagmire of prostitution, the society will never allow her. She was left devastated and as she was walking down the street, it started raining and a car came and stopped by her. The man asked her to come inside and as she had no energy left in her body, she didn't resist to him. He took her to his house and did sexual intercourse with her. But still this man paid her. The innocence of Firdaus lied in the fact that she had seen money for the first time. She got amazed and went to the café and had the best food with that money. This was the point when she realised that money was one of the important things in the world. And finally, she became a high class prostitute. She started earning money and lived in a good apartment and did all what she liked. She started refusing men and slept with the men of her choice. She demanded more money and started becoming famous.

> I asked,
>
> 'How much will you pay?'
>
> 'Ten pounds.'
>
> 'No, twenty.'
>
> 'Your wishes are my orders,' and he paid me on the spot. (Saadawi, 2007, p.74)

She finally realized that this prostitution was making her free and independent and at least she had the opportunity to choose men whom she wants to sleep with. This gave her power and confidence. But a man named Di'aa came and told her that all this money which she earned out of prostitution can never give her respect. This pinched her so much that she was not a respectable woman. Now, her only dream was to be a respectable woman. She applied for a job with her secondary school certificate and

even got the job. She started living in a small apartment. During this job, she realizedthat the plight of women employees is very bad as the men mostly act like hounds and want to sleep with them. But she still continued her job and met Ibrahim, the love of her life. He appreciated her work and loved her back. She narrated her story to him but still didn't have any problem with that. She used to go his apartment and sleep with him as he loved her. But Ibrahim married the daughter of the manager to get promotion in the company. This crushed Firdaus, and she realised that Ibrahim used to love her only to sleep with her as he could not pay to the prostitutes. She was again devastated and felt lost.

> I had never experienced suffering such as this, never felt a deeper pain. When I was selling my body to men the pain had been much less...But when I was prostitute I protected my myself, fought back at every moment, was never off guard. . . In other words, I was telling the man he could have my body, he could have a dead body, but he would never be able to make me react, or tremble, or feel either pleasure or pain. (Saadawi, 2007, p.93)

This was the point of her self-realization. She was now sure that men just used her body in all the ways possible but being a prostitute, she still had a chance to choose men instead of them choosing her. "A successful prostitute is better than a mislead saint" (Saadawi, 2007, p.94). Now, she believed in only one thing and that was to get free from all the men. She sang her childhood song,

> I hope for nothing
> I want for nothing
> I fear nothing
> I am free (Saadawi, 2007, p.95).

She again became a prostitute and earned money. She believed in the fact that now she was free and can live her life according to her wish. But the society can never see a woman flourishing on its own and not sharing a part of her earning with anybody and same happened with Firdaus. A pimp named Marzouk forced himself into her life and became her pimp. Initially, she resisted a lot but later she realized that he had more contacts than her. Marzouk started controlling her life and she started feeling suffocated and she decided to come out of this prostitution again. But he didn't allow Firdaus and they went into a fight and she slapped him. This was the first time she had slapped anybody especially the man. He fought back with her and in the fear of getting injured took the knife and killed him. "I raised the knife and buried it deep in his neck, pulled it out of his neck and then thrust it deep into his chest, pulled it out of his chest and plunged it deep into his belly. I stuck the knife into almost every part of his body"(Saadawi, 2007, p.104). On killing Marzouk, she felt relaxed and free. She started walking on the street and realized that this murder relieved all her pain. This murder was the result of the frustration she had all her life with men who used her body without caring about her feelings. She confessed her crime and was just waiting

to die. This was her emancipation as she wanted to go to a place which was free from men who use women only to satisfy their sexual hunger.

Firdaus was definitely the product of the society which made her hate men so much who uses women's sexuality to dominate and subjugate them.

5. Conclusion

In conclusion, the present study demonstrates that women, irrespective of geographical and cultural demarcations, continue to experience systemic subjugation rooted in patriarchal constructions of gender and sexuality. By juxtaposing the lived realities of two female protagonists situated within the disparate socio-cultural landscapes of Ireland and Egypt, the paper foregrounds the transnational dimensions of female oppression and the shared trajectories of suffering engendered by gendered power structures. Both protagonists endure profound psychological, emotional, and social marginalization within societies that reductively position women as objects of male desire and gratification. Although each woman attempts to reclaim agency by deploying her sexuality as a form of resistance and empowerment, such efforts ultimately culminate in the internalization of patriarchal devaluation and self-alienation. Their experiences reveal the extent to which societal mechanisms of objectification commodify female sexuality, resulting in fractured subjectivities and the gradual erosion of individual identity. Consequently, death emerges as the only conceivable site of liberation and transcendence, symbolizing an escape from the oppressive structures of sexual objectification, gendered violence, and patriarchal domination that circumscribe women's existence.

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Chapter 36 : From Everyday Objects to Collective Memory: A Study of a Memory Museum in Colombo Public Library, Sri Lanka.

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Abstract

People's lives are filled with memories that are connected to objects. This study focuses on the Memory Museum located in the Colombo Public Library in Sri Lanka. This museum is based on the idea of "collective memory" presented in the book *the Archive of Memory* edited by Malathi de Alwis and Hasini Haputhanthri. It is one of the first memory-based museum experiences in Sri Lanka. This study examines how ordinary objects such as Radio, drum, piano, and grinding stones are not just simple things, but become carriers of collective memory when displayed in a museum. The museum contains around 70 objects that represent everyday life to collective memory. The study is based on the ideas of Maurice Halbwachs, who explains that memory is created by society, and Pierre Nora, who explains that objects can become "sites of memory." These ideas help to understand how objects carry cultural meaning and memory. How do everyday objects transform into heritage artifacts within museums, and in what ways do they embody collective memory and cultural meaning? This study uses a qualitative research method, including observation and object analysis. It follows a case study approach. This research focuses on the daily lives of ordinary people instead of kings and monuments. It shows that everyday objects reflect important events like war, the tsunami, and Black July. The study also suggests that the museum can promote understanding, respect, and reconciliation among communities in Sri Lanka.

Key words: memory, museum, black July, war

1.Introduction

Museums are important cultural institutions that preserve history and heritage. In Sri Lanka, many museums focus on kings, temples, monuments, and archaeological objects. However, The Archive of Memory Museum inside the Colombo Public Library presents a different type of museum experience. Instead of royal objects, it displays ordinary items connected to personal and social memories. The museum was created based on the idea of "collective memory," discussed in the book *Archive of Memory* edited by Malathi de Alwis and Hasini Haputhanthri. The museum contains nearly seventy objects collected from Sinhala, Tamil, Muslim, and Burgher communities in Sri Lanka. These objects are connected with important historical events such as: Black July riots in 1983, the Sri Lankan civil war ,the JVP insurgency, the 2004 tsunami, Caste system

At the same time, the museum also preserves memories of friendship, family life, religion, food, migration, and childhood. The museum established for three years by maintain collaborate of few institutions. Colombo public library, Colombo municipal council, Europe union in Brussels, Berlin German federal foreign office, Yuma foundation in Colombo, Ministry of Justice.

The main argument of this research is that ordinary objects become carriers of collective memory when displayed in a museum. Through the museum environment, simple objects gain cultural and historical meaning.

The research asks the following questions:

1. How do everyday objects function as collective memory?
2. How does the museum transform ordinary objects into heritage objects?
3. What cultural meanings are connected to these objects?

2.Literature Review

Memory is an important part of human life and society. It helps people understand the past and connect it with the present. Recent studies show that memory is not only personal but also social and cultural. Aleida Assmann (2006) explains that memory research is an interdisciplinary field. It includes history, psychology, culture, politics, and literature. This means memory is studied in many different ways because it is connected to many parts of human life. Scholars also explain that memory is often connected to objects. In museum and memory studies, objects are very important because they help people remember past events. Research on material memory shows that objects carry stories and emotions. Without objects, many memories can be

forgotten or become weak (Hoskins, 2011).Maurice Halbwachs (1992) introduced the idea of "collective memory." He explains that memory is not only personal. It is created by society, family, religion, and social groups. People remember the past through their communities. This idea is very important for museums because museums also show shared memories of society, not only individual memories. Pierre Nora (1989) introduced the concept of "sites of memory" (lieux de mémoire). He explains that places, objects, and symbols become important when societies attach meaning and emotion to them. These sites help preserve memory when living memory is weak or disappearing. In museums, ordinary objects become symbols of identity, history, and emotional experience. Museum scholars also explain that museums are not only places for storing objects. They are also places for storytelling and emotions. Arnold-de Simine (2013) explains that museums often show difficult histories such as war, trauma, and migration. These museums help visitors feel empathy and understand past suffering.Research by Kos (2016) shows that museum objects change meaning when they enter museums. Everyday objects lose their normal use and become memory objects. They represent not only one person's story but also the memory of a whole community.Studies also show that memory museums help society understand conflict and build peace. Museums that show war, displacement, and violence can help different communities understand each other's experiences. This can support reconciliation and social healing (Williams, 2007).

Overall, previous studies show that memory is social, not only individual. Objects play an important role in keeping memory alive. Museums help transform everyday objects into symbols of collective memory, identity, and history.

3.Methodology

This study employs a qualitative research methodology using a case study approach focused on the Memory Museum at the Colombo Public Library in Sri Lanka. The qualitative approach was selected because the study aims to interpret meanings, emotions, and social experiences associated with museum objects rather than produce statistical findings.

3.1 Research Site

The Archive of Memory Museum at the Colombo Public Library was selected as the primary research site because it represents one of Sri Lanka's earliest museum initiatives dedicated specifically to collective memory and everyday social history. The museum contains approximately seventy objects collected from diverse ethnic and social communities across Sri Lanka.

3.2 Data Collection Methods

Data were collected through three primary methods:

Observation method used as one of main method**.** Direct observation was conducted within the museum space to examine: The types of objects displayed, Exhibition arrangements and presentation styles, Object labeling and narrative descriptions, Visitor interaction with exhibits ,Spatial organization of memory themes Field observations were recorded through detailed notes during multiple visits to the museum and Using The Archive of Memory book.

3.3. Object Analysis

The study analyzed selected museum objects in order to identify: Historical and emotional meanings attached to objects, Social and cultural contexts represented by objects, Connections between objects and collective memory, Symbolic transformations from everyday items to heritage artifacts

3.4 Narrative Interpretation

The study also examined the memory narratives attached to each object through museum descriptions, using book of the Archive of memory and curator's storytelling. These narratives were interpreted using theories of collective memory and sites of memory in order to understand how individual experiences become part of broader social memory.

3.5 Theoretical Framework

This study is guided by Maurice Halbwachs' theory of collective memory and Pierre Nora's concept of "sites of memory." Halbwachs' theory helps explain how memories are socially constructed through communities and shared experiences, while Nora's framework explains how ordinary objects become symbolic memory sites when preserved within cultural institutions such as museums.

4. Findings

The Archive of Memory Museum contains around seventy objects connected to memories from different communities in Sri Lanka. The objects are simple everyday items, but each object carries a powerful story. The museum includes: household objects, personal belongings, objects connected to war, objects related to migration and disaster, childhood items, cultural and religious objects Unlike traditional museums,

the value of these objects does not come from age or money. Their value comes from the memories attached to them. The museum especially focuses on: ordinary people, social history, emotional experiences, cultural diversity, collective trauma The museum creates a space where personal memories become part of national memory.

4.1 Objects Displayed in the Memory Museum and Their Social Meanings

Object	Memory Story	Community or Meaning Represented
Silver Bangle	A young woman wore a silver bangle gifted by her mother during the 1948 Independence Day pageant. She later preserved it as a memory of Sri Lanka's independence celebration.	Sinhala community; memory of Sri Lankan independence and national pride.
Coir Rope	A.T. Ariyaratne saw a poor woman begging despite making coir rope for very little income. This experience inspired him to create a fair system for coir workers.	Sinhala rural community; social justice, labour exploitation, and community development.
Micro-light Aircraft	Inventor Ray Wijewardhana built his first aircraft at Cambridge University in the 1950s. His relatives remember this achievement proudly.	Sinhala community; innovation, creativity, and scientific achievement.
Paper Cone	Writer Sunethra Rajakarunanayaka remembered reading paper cones used to wrap groceries because books were rare in her childhood.	Childhood memory; Sinhala literary culture and gratitude for knowledge.
White Cadillac Vehicle	A.E.T. Perera remembered seeing Queen Elizabeth II travelling in a white Cadillac during her visit to Sri Lanka.	Childhood memory; colonial and post-independence historical memory.
Wada Kaha (Turmeric)	During a solar eclipse, people drank turmeric and coconut milk believing it would make them fair-skinned, following newspaper myths.	Social beliefs, myths, and collective behaviour in Sinhala society.
Dutugamunu Statue	Communist party members gathered before the Dutugamunu statue and vowed to protect Sinhala culture and language.	Political memory, Sinhala nationalism, and childhood recollection.
Report Card	A father punished his son for poor English marks, encouraging him to improve. Later, he became fluent in English.	Education, parental influence, and social mobility in Sinhala society.

Object	Memory Story	Community or Meaning Represented
"We Are Sinhala" Board	During Black July, a Sinhala woman protected Tamil neighbors by displaying a board reading "We Are Sinhala."	Black July memory; racism, solidarity, protection, and humanity.
Pinthaliya (Water Pot)	A village pinthaliya allowed everyone, regardless of caste, to drink water freely.	Sinhala village life; caste system and social kindness.
Cherry Voile Saree	A Muslim girl remembered restrictions placed on girls according to cultural traditions during family travel.	Muslim traditions, gender expectations, and cultural identity.
Ice Chocs	A Tamil cinema manager kindly gave chocolates to Sinhala children before Black July riots destroyed the cinema.	Inter-ethnic friendship, childhood memory, and Black July trauma.
Rattan Chair	Students cleaned wicker chairs during school protests linked to Tamil language policy debates.	Political unrest, language conflict, and school memory.
Hunu Killotaya (Lime Container)	Reeta traced forgotten family history through an inherited lime container linked to a Sinhala grandmother.	Family heritage, colonial history, and memory preservation.
Wedding Necklace	Sunethra Bandaranaike remembered a wedding necklace gifted by her mother, Sirimavo Bandaranaike.	Family memory and maternal heritage.
Beef Lamprais	A family stopped eating beef due to Buddhist influence, though childhood memories of beef lamprais remained strong.	Religious influence, social change, and food memory.
Race Sheet	A grandfather became emotionally attached to horse racing after losing land to the government.	Family memory, government influence, and emotional coping.
License Plate ("Sri" Plate)	Anthropologist Dennis McGilvray preserved a Sri Lankan jeep number plate from the period of ethnic tensions over Sinhala lettering.	Historical memory, ethnic politics, and foreign experience in Sri Lanka.
Aasmi Sweet	Tamil, Sinhala, and Muslim friends shared sweets together before ethnic riots separated them.	Brotherhood, cultural sharing, and the impact of riots.
Bread Queue	Vishnu stood in bread queues during 1970s shortages, marking his place with a brick.	Economic hardship, childhood responsibility, and political history.

Object	Memory Story	Community or Meaning Represented
Rubber Seeds	Nadun remembered playing with rubber seeds before plantations disappeared.	Rural change, economic transformation, and childhood memory.
Jujubes	Upali remembered the kindness of Tamil and Muslim businessmen before Black July forced many to leave.	Brotherhood, racism, and childhood affection.
Spectacles	A Tamil teacher hid under a bed during Black July riots, remembered through his slipping spectacles.	Fear, racism, and traumatic childhood memory.
Notebook	Poet Jean Arasanayagam found an old notebook among relief donations and later wrote poetry in it.	Black July memory, creativity, and new beginnings.
Bilin Tree (Bilimbi Tree)	A Tamil family sheltered by Burgher neighbors during Black July received a bilimbi sapling as a symbol of friendship.	Kindness, gratitude, and inter-ethnic solidarity.
Wristwatch	A Sinhala boy took a broken watch from a looted Tamil shop during Black July and later reflected on racism critically.	Personal transformation and anti-racist understanding.
Mushrooms	Mushrooms helped Rev. Joshua's family survive poverty and displacement before migration.	Survival, gratitude, migration, and hardship.
Pottu	Tamil women stopped wearing the pottu during Black July out of fear for safety.	Cultural suppression, fear, and identity loss.
Sandwiches	Sri Lankan diplomats nervously ate sandwiches during discussions leading to the Indo - Lanka Accord.	Political history, war memory, and diplomacy.
Water Jug	A caste-conscious grandmother accepted water from a lower-caste woman during wartime displacement.	Collapse of caste barriers and social change during war.
Coconut Shells	Coconut shells reminded a woman of her father's death during the war.	Trauma, dowry traditions, and grief.
Pawana Cassette	A family buried politically sensitive music cassettes during the JVP insurgency.	Political fear, youth rebellion, and music memory.
Rifle	A JVP member and a government officer shared drinks instead of violence during the insurgency.	Humanity during political conflict.

Object	Memory Story	Community or Meaning Represented
Saree Pota (End of Saree)	A mother covered her daughter's eyes from seeing burning dead bodies during the JVP violence.	Childhood trauma and political violence.
Radio	Loud radio music was used to hide torture camp screams during the JVP insurgency.	Fear, violence, silence, and trauma.
T-56 Gun	An army officer spared a suspected JVP youth and expressed exhaustion with violence.	Humanity amid political conflict.
Clay Bowl	Actress Irangani Serasinghe's maid questioned her eating from a clay bowl in a teledrama.	Class identity and cultural expectations.
Thong	Garment factory workers faced social stigma despite contributing to economic development.	Women's labour, industrialisation, and cultural change.
Grinding Stone	Subeyida carried her inherited grinding stone while fleeing war in Mannar.	Family heritage, displacement, and emotional attachment.
Dictionary and Pocket Bible	A Tamil boy fleeing war carried books he loved, later embracing multiple religions.	War displacement, education loss, and religious openness.
Saucepan	A family preserved an old saucepan used for survival during wartime displacement.	Gratitude, survival, and Tamil war memory.
Chain and Bangles	An army soldier used hidden jewellery found during war to arrange his sister's wedding.	War, poverty, and family duty.
Piano	A Tamil family's piano was secretly returned by an army soldier during the war.	Humanity, coexistence, and art beyond ethnic conflict.
Fish Buns	Sri Lankans in Chicago celebrated the 1996 Cricket World Cup together with traditional food.	National unity and diasporic identity.
Driver Manual	A diving coach's manual remained as a memory after his sudden death.	Personal memory and family remembrance.
Police Registration Form	A Tamil family was detained because a newly married woman's name was missing from registration records.	War anxiety, surveillance, and insecurity.
Baby Shoe	A grandmother cried after seeing her granddaughter's shoe at a war memory exhibition.	Grief, mourning, and civilian trauma.

Object	Memory Story	Community or Meaning Represented
Maldive Fish Sambol	During the airport attack, a woman fleeing danger was suspected because of the food she carried.	War anxiety and misunderstanding.
Glass Tea Cup	Sinhala and Tamil women working in Dubai communicated by throwing glasses between houses.	Migration, friendship, and inter-ethnic bonds.
Christmas Tree	A Catholic family stopped decorating their Christmas tree after the death of a Buddhist monk.	Religious respect and solidarity.
Plate	A Tamil mother still places food before the photograph of her missing son.	Grief, disappearance, and maternal love.
Swing	A tsunami survivor identified his destroyed home through a swing and later removed it due to painful memories.	Tsunami trauma, grief, and loss.
Silver Brooch	A Muslim family treasured a brooch gifted by a Sinhala woman before the tsunami claimed their daughter.	Inter-ethnic friendship, healing, and disaster memory.

4.2Main Themes Identified from the Objects

1.War and Violence- Many objects are connected to the Sri Lankan civil war, the JVP insurgency, and Black July riots. Objects such as the radio, baby shoe, pottu, coconut shells, and police form preserve memories of fear, displacement, torture, death, and survival.

2.Childhood Memories - Several objects preserve memories of childhood experiences, including the paper cone, bread queue, rubber seeds, ice chocs, and swing. These objects show how ordinary childhood moments become emotionally meaningful over time.

3.Inter-ethnic Friendship and Humanity - Objects such as the silver brooch, glass tea cup, ice chocs, and piano highlight friendship and solidarity between Sinhala, Tamil, Muslim, and Burgher communities despite ethnic conflict.

4.Family and Heritage - Inherited objects such as the grinding stone, wedding necklace, saucepan, and silver bangle represent motherhood, family lineage, emotional attachment, and continuity across generations.

5.Social Change and Cultural Identity- Objects such as the water jug, pottu, beef lamprais, and thong reveal changes in caste, gender roles, religion, labour culture, and social traditions in Sri Lanka.

6.Migration and Displacement - Several stories involve migration caused by war, employment, or disaster. Objects such as the dictionary and pocket Bible, glass tea cups, and license plate symbolize movement, exile, and diasporic identity.

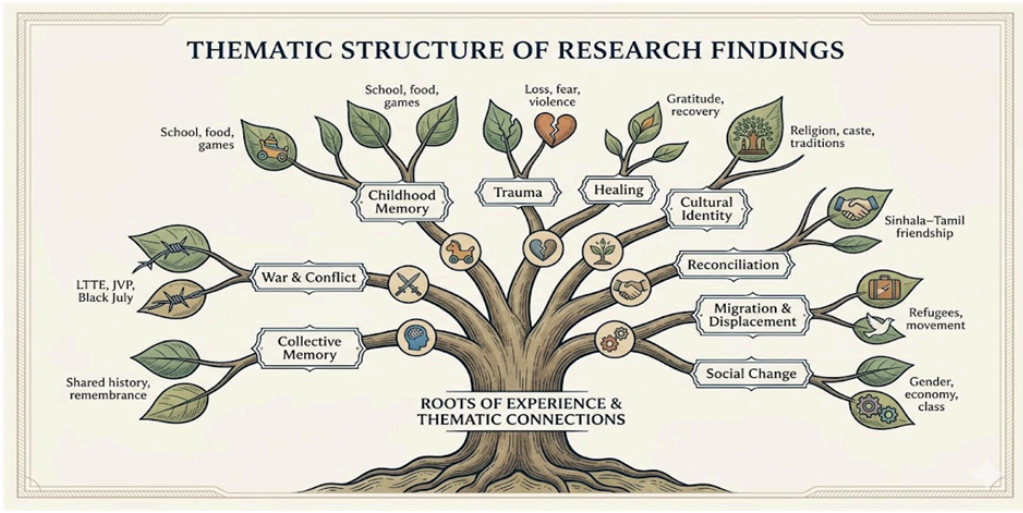


Figure 1. Theatric Structure of Findings

5. Discussion

5.1 Memory Museum as an Alternative Heritage Space

The Memory Museum at the Colombo Public Library presents an alternative approach to understanding history and heritage in Sri Lanka. Unlike conventional museums that primarily focus on kings, monuments, religion, and political leaders, this museum foregrounds the lived experiences of ordinary people through everyday objects. Items such as radios, baby shoes, grinding stones, pottu, water jugs, glass tea cups, wedding necklaces, and paper cones are transformed from ordinary household objects into carriers of social and emotional memory. Through their placement within the museum

context, these objects acquire historical and cultural significance beyond their original practical functions.

The museum also challenges dominant state-centered heritage narratives by recognizing marginalized and personal histories. The collected objects represent memories from Sinhala, Tamil, Muslim, and Burgher communities across Sri Lanka, thereby creating a more inclusive representation of national history. In this sense, the museum functions not only as a repository of objects but also as a space of social remembrance and emotional reflection.

5.2 Collective Memory and the Social Construction of Memory

The findings of this study strongly reflect Maurice Halbwachs' theory of collective memory. Halbwachs argues that memory is socially constructed through family, community, religion, and shared social experiences rather than through isolated individual recollection. The museum demonstrates this process by presenting objects that connect personal experiences with broader collective histories.

For example, the radio displayed in the museum symbolizes more than a technological device used for entertainment or communication. It represents the fear, uncertainty, and silence associated with periods of political violence during the JVP insurgency. Similarly, the baby shoe displayed in the museum transcends its identity as a personal belonging and becomes a symbol of grief, displacement, and civilian suffering during the Sri Lankan civil war. These objects illustrate how individual memories become integrated into collective social memory through shared historical experiences.

The museum therefore highlights that memory is not static or individualistic but socially shaped and continuously reconstructed through cultural narratives and communal experiences.

5.3 Objects as ''Sites of Memory"

The study also supports Pierre Nora's concept of *lieux de mémoire* or "sites of memory." Nora explains that objects, places, and symbols become important memory sites when societies attach emotional and historical significance to them, particularly when lived memory begins to fade.

Within The Archive of Memory Museum, ordinary objects such as grinding stones, paper cones, tea cups, and water pots become symbolic representations of the past. Removed from their everyday functional contexts, these objects are transformed into cultural artifacts that preserve emotional and historical meanings. The museum

therefore functions as a space where material objects safeguard memories that might otherwise disappear over time.

This symbolic transformation is particularly visible in objects associated with trauma and violence. For instance, the police registration form, coconut shells, saree cloth pieces, and pottu collectively preserve memories related to ethnic conflict, surveillance, fear, and displacement. Through their museum display, these objects become physical reminders of historical trauma and social suffering.

5.4vWar, Trauma, and Collective Suffering

One of the most significant themes represented in the museum is collective trauma associated with the Sri Lankan civil war, the Black July riots of 1983, and the JVP insurgency. Many displayed objects communicate memories of violence, loss, displacement, and survival.

Objects such as radios, baby shoes, police forms, and coconut shells preserve deeply emotional experiences connected to conflict. These items demonstrate how ordinary material culture becomes intertwined with historical violence and social suffering. Through Halbwachs' framework, these memories can be understood as part of Sri Lanka's collective consciousness rather than isolated personal experiences.

At the same time, Nora's theory helps explain how these objects become enduring memory sites. The baby shoe, for example, functions as a symbol of civilian grief and wartime loss, while the radio represents fear, secrecy, and political terror during periods of violence. The museum therefore materializes traumatic histories through everyday objects, enabling visitors to emotionally engage with difficult aspects of Sri Lankan history.

5.5 Childhood Memory and Everyday Life

In addition to trauma, the museum preserves memories associated with childhood, family life, and ordinary social experiences. Objects such as rubber seeds, bread queues, paper cones, swings, and ice chocs reflect everyday moments that acquire emotional significance over time.

These objects demonstrate that collective memory is not limited to national crises or political conflict but also includes ordinary experiences of play, food, education, and village life. Halbwachs emphasizes that childhood memories are shaped within social

environments such as families and communities. The museum allows visitors to reconnect with these shared cultural experiences and recognize the emotional importance of everyday life.

Furthermore, through Nora's concept of sites of memory, these childhood objects preserve cultural practices and social experiences that are gradually disappearing within modern society. The museum therefore contributes to safeguarding intangible cultural memory through material representation.

5.6 Inter - Ethnic Relationships and Reconciliation

Another important contribution of the museum is its representation of inter-ethnic relationships and social coexistence. Sinhala, Tamil, Muslim, and Burgher memories are presented collectively within the same exhibition space, emphasizing shared humanity despite histories of conflict and division.

Objects such as glass tea cups, silver brooches, pianos, and ice chocs preserve memories of friendship, hospitality, protection, and care between different ethnic communities. These narratives challenge dominant representations of ethnic conflict by foregrounding moments of solidarity and coexistence.

Through Halbwachs' perspective, collective memory is shaped through social interaction and shared experiences. By presenting multiple community memories together, the museum encourages empathy and mutual understanding among visitors. Simultaneously, Nora's framework suggests that the museum itself functions as a collective site of memory where conflict, reconciliation, and coexistence are remembered together.

5.7 Gender, Family, and Domestic Memory

The museum also gives significant attention to women's experiences and domestic life. Objects such as grinding stones, clay bowls, saucepans, sarees, and wedding necklaces are closely associated with motherhood, caregiving, household labour, and intergenerational family traditions.

These objects reveal how domestic spaces contribute to the formation of memory and cultural identity. Halbwachs identifies the family as one of the primary social frameworks through which memory is transmitted. Many museum narratives preserve memories connected to mothers, grandmothers, and family relationships.

Similarly, Nora's concept explains how domestic objects become symbolic memory sites when preserved within museums. In this context, household items represent not only labour and routine but also emotional attachment, cultural continuity, and familial belonging.

5.8 Social Change, Migration, and Displacement

The museum further documents social transformation within Sri Lankan society through objects related to caste, religion, migration, labour, and displacement. Items such as pottu, water jugs, beef lamprais, dictionaries, and license plates reveal changing social identities and cultural practices.

For example, the pottu traditionally symbolizes Tamil cultural identity; however, during periods of ethnic violence some women removed it for safety and survival. This demonstrates how political conflict influences cultural expression and personal identity. Similarly, objects associated with migration and displacement reveal how individuals maintain emotional connections to lost homes and communities through material belongings.

These findings align with Halbwachs' argument that identity and memory are socially conditioned and shaped by historical circumstances. Through Nora's framework, the preservation of such objects enables museums to document experiences of migration, exile, and social transformation for future generations.

5.9 Reframing Heritage and Historical Narratives

A major contribution of The Archive of Memory Museum is its challenge to conventional understandings of heritage in Sri Lanka. Traditional heritage institutions often prioritize monuments, religious architecture, elite history, and state-centered narratives. In contrast, the Memory Museum foregrounds ordinary people, marginalized communities, women's experiences, childhood memories, and hidden social histories.

The museum therefore democratizes heritage by recognizing everyday experiences as historically valuable. It expands the definition of heritage beyond monumental history and demonstrates that collective memory can also be preserved through ordinary material culture.

Importantly, many stories represented in the museum are absent from official historical narratives. By preserving these memories, the museum gives visibility to voices that

are frequently excluded from dominant historical discourse. The museum thus acts as both a cultural archive and a space of social recognition.

6. Conclusion

This study examined how ordinary objects in The Archive of Memory Museum at the Colombo Public Library become carriers of collective memory in Sri Lanka. Using the theories of Maurice Halbwachs and Pierre Nora, the study showed that memory is socially constructed and that everyday objects can function as important "sites of memory" when preserved within museum spaces. The findings reveal that objects such as radios, baby shoes, grinding stones, and tea cups preserve memories related to war, migration, childhood, family life, trauma, and inter-ethnic relationships. Through museum display, these ordinary items gain historical, emotional, and cultural significance, transforming personal experiences into collective social memory. The study also highlights the importance of the Memory Museum as an alternative heritage space that challenges traditional state-centered historical narratives by focusing on the lived experiences of ordinary people. By preserving marginalized memories and stories of coexistence, the museum promotes empathy, understanding, and reconciliation among communities in post-conflict Sri Lanka.

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Chapter 37: From Caste to Ethnicity: Rethinking Social Justice and State Policy in Contemporary South Asia (India and Sri Lanka)

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Abstract

Social inequality in South Asia is not simply a consequence of uneven economic development but is deeply rooted in historically evolved systems of stratification such as caste and ethnicity. While these forms of exclusion have generated substantial scholarly attention, they are often studied separately, limiting a broader understanding of how inequality operates across the region. This chapter addresses this gap through a comparative analysis of India and Sri Lanka, examining how caste-based and ethnic inequalities are shaped, institutionalized, and negotiated through state structures, democratic politics, and historical processes. Drawing on B.R. Ambedkar's critique of caste as a system of graded inequality alongside Nicholas Dirks' argument regarding the colonial reconfiguration of caste identities, the study situates caste as both historically embedded and adaptable within modern governance structures. At the same time, Benedict Anderson's concept of "imagined communities" and Stanley Tambiah's analysis of ethnic nationalism provide important insight into how political identities in Sri Lanka were constructed and mobilized in ways that reinforced exclusionary state practices and majoritarian politics. Together, these perspectives suggest that inequality in South Asia is not accidental or temporary but deeply connected to institutional arrangements, historical memory, and struggles over representation and citizenship. The chapter is guided by social justice and postcolonial perspectives, supported by a state-centric approach that views the state as an active arena where competing claims of equality, identity, and power are continuously negotiated. Methodologically, the study adopts a qualitative comparative approach based primarily on secondary sources, including scholarly books, journal articles, constitutional debates, and policy-oriented literature. Through this framework, the chapter critically examines the gap between constitutional promises and lived realities in both India and Sri Lanka. It argues that despite their different historical trajectories, caste and ethnicity continue to function in comparable ways as enduring systems of structured exclusion, while state-led interventions frequently remain limited in achieving substantive justice and meaningful inclusion. By bringing these two cases into a shared comparative framework, the chapter contributes to a

more connected understanding of inequality, democracy, and social justice in contemporary South Asia.

Keywords- Caste, Ethnicity, Inequality, Social Justice, South Asia, State Policy

1. Introduction

The question of social justice has been among the most pressing political and social issues facing the people of south asia today. Despite constitutional democracy, welfare-oriented governance, and developmental reforms, deeply rooted forms of exclusion continue to shape social and political life across the region. South Asian inequalities have traditionally gone far beyond the material and economic dimensions and have often acquired critical dimensions concerning identity, representation, dignity, and institutional access. In other words, historical inequalities related to caste and ethnicity have not been significantly mediated through formal political systems in South Asia, where issues of citizenship, opportunity and political participation continue to be contested within South Asia, comparative studies between India and Sri Lanka have been crucial in developing many themes central to this argument. In India, caste has historically shaped social hierarchy, institutional access, and political representation. While constitutional provisions and affirmative action may provide some redress against caste-based discrimination, various forms of caste-based exclusion continue to characterize social life. Sri Lanka, meanwhile, experienced the politicization of ethnicity through postcolonial nationalism, language policy, and state formation. For example, in the post independent period, ethnic conflicts between the majority Sinhalese and Tamil minorities have shaped issues related to democratic politics, the legitimacy of the state, and social inclusion.

This chapter sets out a perspective on caste and ethnicity in South Asia that regards them as systems of social justice issues and state policies in South Asia. It does not argue that caste and ethnicity are identical categories. but as critical systems of exclusion shaping participation in institutions, dignity, representation, and access to power. This is why this chapter compares India and Sri Lanka to locate some of the larger debates on democracy, inclusion, and postcolonial governance in South Asia within their wider parameters.

Three guiding questions are laid out for this study. First, how have caste and ethnicity been historically embedded in the structures of exclusion in India and Sri Lanka? Second, what do democratic institutions and state policies do to rectify these inequalities? Third, given constitutional guarantees, welfare regimes, and institutional reforms, why do the modalities of exclusion persist?

This chapter argues that despite the centrality of constitutional democracy and welfare measures, the State does not automatically erase or neutralize historically embedded

forms of inequalities. Caste and ethnicity, therefore, reproduce themselves in new forms within the dynamic political and institutional contexts.On the one hand, the democratic institutions expand the opportunities for inclusion; on the other, they recreate the modalities of exclusion through unequal access, identity-based mobilization, and institutional imbalance.

This chapter follows a qualitative, comparative methodology based on secondary literature and theoretical scholarship, as well as policy-oriented work. Among others, this chapter engages the works of B.R. Ambedkar, Benedict Anderson, Nicholas Dirks, Stanley Tambiah, Neil DeVotta, and Kalinga Tudor Silva in situating identity, state formation, and inequality within South Asian societies.

This chapter is divided into eight sections. After the introductory section, the literature review addresses the most important scholarly debates on caste, ethnicity, nationalism, and social justice.The theoretical framework and methodology are discussed in the next section. Then, the chapter traces the historical evolution of inequality in South Asia before delving into the case studies of India and Sri Lanka.This is followed by a comparative analytical discussion that brings the two cases into the broader South Asian perspective. The chapter concludes with reflections on social justice, democratic inclusion, and policy in South Asia.

2. Literature Review

2.1 Understanding Caste and Social Hierarchy

While the question of caste has been fundamental to the social and political thinking in India, perhaps the most definitive position on the subject is that of Dr. B. R. Ambedkar, who states that caste is nothing but a system of graded inequality, which deprives the lowest sections of society of any claim to dignity and equal citizenship. One of the most influential voices in this debate remains B.R. Ambedkar, who viewed caste as a deeply embedded system of graded inequality that denied dignity and equal citizenship to marginalized communities (Ambedkar, 1936). Ambedkar argued that political democracy could not survive without social democracy, emphasizing that legal equality alone would remain insufficient in a society structured around hierarchy and exclusion.

Later approaches to caste differ considerably from ambedkar’s position. Louis Dumont emphasized hierarchy and ritual purity as the organizing principles of caste society (Dumont, 1980).However, Dumont work on caste has been criticized as being somewhat static and self-contained culturally. Nicholas Dirks shifted the debate by arguing that caste in its modern form was significantly shaped through colonial administrative practices, classification, and institutional codification (Dirks, 2001).

Susan Bayly further explored how caste adapted itself within modern democratic politics and institutional structures (Bayly, 1999).

Recent work by Dipankar Gupta has suggested that caste continues not because society is unchanged but because caste continues to reinvent itself in tune with the new economic and political realities. The feminist contribution to this has been very powerful, with Uma Chakravarti, for instance, demonstrating how caste intersects with gender and class to produce multiple layers of marginalization.

2.2 Ethnicity, Nationalism and Exclusion in Sri Lanka

The study of srilanka has been dominated by themes such as ethnicity , nationalism, and majoritarian politics . for example Benedict Anderson's concept of imagined communities demonstrates how national identity is socially and politically constructed However, in the Sri Lankan context, the ethnic identity of the constituent groups was constructed in association with state-building and democratic competition after independence. Stanley Tambiah examined how religion, language, and ethnicity became deeply connected to postcolonial politics in Sri Lanka (Tambiah, 1986). More recently, DeVotta (2004) has argued that the very structure of democratic institutions has increasingly been designed to express the majoritarian nationalism of the dominant group while excluding minorities. In addition, Kalinga Tudor Silva has significantly enriched comparative South Asian scholarship by demonstrating how the analytical separation between caste and ethnicity cannot be maintained. His studies have highlighted the complementary forms of exclusion within Sri Lankan society and thus opened up wider comparative possibilities within South Asia (Silva, 2005).

2.3 State, Welfare and Social Justice

This is a general feature of South Asian scholarship on the state, which generally considers its role in correcting or compensating for inequality as resulting from its constitutional or welfare commitments, affirmative action policies, or reconciliation mechanisms. In other words, the state, in all its forms and through its agencies, participates in a historically constitutive relationship with unequal social relations. However, scholars also argue that state institutions frequently operate within historically unequal social environments.

Marion Young rightly points out that structural inequalities cannot be remedied through formal legal equality alone because exclusion is reproduced by the very institutional structures (Young, 1990).Iris Marion Young emphasized that structural inequality cannot be addressed through legal equality alone, as institutional arrangements themselves often reproduce exclusion (Young, 1990).

2.4 Comparative Perspectives in South Asia

However, the caste system and the question of ethnicity in South Asia have largely remained separate fields, and while there has been a fair amount of literature on each, comparative work between the two is still scant. Most studies on caste and ethnicity are based on national contexts. However, a comparative perspective can reveal general patterns at the regional level about the working of identity, exclusion, and democratic governance in the postcolonial states of South Asia.

2.5 Emerging Research Gap

While existing literature on caste, ethnicity, and state formation in South Asia provides a strong base, there remains a clear gap in comparing the two identities under the rubric of social justice and democratic inclusion. there remains a clear gap in comparing the two identities under the rubric of social justice and democratic inclusion. This chapter attempts to fill this gap by bringing India and Sri Lanka into a connected comparative conversation on identity, exclusion, and state policy.

3. Theoretical Framework and Research Methodology

3.1 Social Justice and Structural Inequality

Instead, social justice is thus positioned beyond the immediate scope of economic questions and is located in a broader space that extends to the politics of dignity, representation, and access to institutions. Ambedkar argued that political democracy could not survive without social democracy (Ambedkar, 1936). Indeed, this is an essential question for South Asia, where social hierarchies remain strong despite formal constitutional equality. The focus is thus retained on the formal equality-substantive inclusion dimension. In this regard, despite constitutional guarantees of legal protection, socially marginalized groups often face a multitude of barriers arising from social structures and institutional practices.

3.2 Postcolonial Perspective

Following a postcolonial approach, the manner in which colonial administration reconfigured social identities and institutional organization is considered here.. Dirks argued that colonial administrative codification transformed caste identities into rigid institutional categories (Dirks, 2001). Similarly, Anderson’s work highlights how nationalism is shaped through political imagination, institutions, and state narratives (Anderson, 2006).

3.3 State-Centric Understanding of Social Justice

The postcolonial state is thus central to this thesis. In the South Asian context, especially India and Sri Lanka, the state has assumed primary responsibility for the

promotion of inclusion and the rectification of historical injustice. However, since state agencies operate within historically unequal societies, these same agencies are also implicated in the reproduction of exclusion.

3.4 Research Design and Methodology

This chapter adopts a qualitative, comparative methodology based on secondary sources, such as books and articles, reports, constitutional debates, policy documents, and theoretical literature. Accordingly, the methodology employed is interpretive rather than statistical, focusing on repeated themes such as exclusion, representation, citizenship, nationalism, and access to institutions.

3.5 Scope and Limitations of the Study

This study takes India and Sri Lanka as comparative cases of identity-based exclusion in South Asia. While other South Asian societies also face identity-based exclusion, this study limits itself to cases of caste- and ethnicity-based exclusion. It is also a literature review study, not a primary fieldwork study.

4. Historical Context of Inequality in South Asia

4.1 Historical Evolution of Caste in India

The caste system has long been one of the main determinants of social stratification in South Asia. While social stratification took different forms across regions and over time, this gradually became associated with differential access to dignity, mobility, and participation. Ambedkar viewed caste as a system of graded inequality that institutionalized exclusion within everyday life (Ambedkar, 1936). Indeed, colonial censuses and classification made caste identities more rigid and politically legible (Dirks, 2001).

4.2 Colonialism and Social Stratification

Colonialism was one of the most important influences on social and political identities throughout South Asia. Indeed, colonial rule used classification, categorization, and institutional codification as basic administrative tools (Dirks, 2001).The sense of identity, representation, and access to power of many communities were thus changed.

4.3 Rise of Ethnic Nationalism in Sri Lanka

Post-independence politics in Sri Lanka was framed within the discourse of Sinhala-Buddhist nationalism. Over time, policy on language, representation, and citizenship contributed to making ethnicity an important political issue in Sri Lanka .The Sinhala Only Act of 1956, which made Sinhala the only official language, was

one of the major turning points in this regard as it linked language with state machinery and public services. According to Tambiah, Sinhala-Buddhist nationalism became an important dimension in postcolonial state formation and democratic politics (Tambiah, 1986).

4.4 Postcolonial State Formation and Continuing Exclusion

Both India and Sri Lanka entered the postcolonial period with democratic constitutions and welfare- oriented state policies. However, state institutions have remained thoroughly permeated with embedded social hierarchies. Indeed, democratic governance, while enabling new possibilities of inclusion, simultaneously reproduced older forms of exclusion along lines of access and identity-based mobilization.

5. Caste, State Policy and Social Justice in India

5.1 Constitutional Vision of Equality

In this regard, the Indian Constitution made a fundamental, dramatic step toward addressing historical injustices through democratic and legal processes.. Ambedkar believed that political equality would remain incomplete without social and economic equality (Ambedkar, 1947). In this context, Articles 14, 15, 17, and 46 of the Constitution all strongly signified a commitment to equal dignity and social justice.

5.2 Reservation Policies and Welfare Measures

The state attempted to redress these past injustices and disparities through affirmative action policies, as defined by Mendelsohn and Vicziany (1998).In this way, the reservation policy enhanced access to education, jobs, and political representation for the previously marginalized groups, thus making them visible in the democratic institutions. However, at both regional and institutional levels, the implementation of these policies has been patchy.The welfare measures have generally faced bureaucratic hurdles and societal resistance and are accessed unequally.

5.3 Education, Employment and Social Mobility

Education thus emerged as a critical avenue for social mobility among the marginalized groups.This access to education among the marginalized groups contributed to the growth of political awareness and participation in political institutions (Thorat & Newman, 2010).Yet, caste-based disparities persist concerning the quality of education, treatment in institutions, and the availability of jobs.

5.4 Persistence of Structural Inequality

Caste-based inequalities survive despite all the constitutional changes and welfare measures, either in their overt or more subtle forms. Dipankar Gupta noted that the caste system survived because it accommodated itself within the changes in political and economic modernity (Gupta, 2005).Moreover, caste-based discrimination, along with gender and class axes, is constitutive of multiple marginalities (Chakravarti, 2003).

5.5 Limits of State Intervention

The state has certainly played a significant role in expanding the scope of democratic participation and broadening institutional inclusion. However, law and legal reform have proven to be insufficient for transforming the social reality. In most cases, state policies are resisted in their implementation, either because of the local power structures or due to inequality within institutions.

6. Ethnicity, Nationalism and State Response in Sri Lanka

6.1 Rise of Sinhala-Buddhist Nationalism

Post-independence Sri Lanka witnessed the increasing politicization of Sinhala-Buddhist nationalism. Over time, majority identity intertwined with claims to democratic legitimacy, the exercise of state power, and notions of national identity. Tambiah examined how Sinhala-Buddhist nationalism became deeply tied to postcolonial state formation (Tambiah, 1986). DeVotta further argued that democratic politics in Sri Lanka increasingly reflected majoritarian nationalism (DeVotta, 2004).

6.2 Tamil Marginalization and Political Exclusion

From the very first years of independence, Tamil demands for greater equality were frustrated by language policies, citizenship laws, and institutionally discriminatory practices. Access to language, employment, and citizenship all became tied to state legitimacy.

Each round of political negotiation proved unsuccessful in reaching any sustainable solution to representation or autonomy issues, with interethnic relations increasingly polarized

.6.3 Civil Conflict and State Response

The failure of democratic mechanisms to resolve ethnic conflict peacefully laid the foundations for the outbreak of a protracted civil conflict.This, in turn, transformed the relationship between the state and society, marked a decisive shift toward militarization, and redefined the terrain of politics in the country.

Indeed, many issues relating to war and its aftermath, including accountability, reconciliation, and minority rights, continued to dominate political debates well into the post-war era (Weiss, 2011).

6.4 Post-War Reconciliation and Social Justice

Post-war Sri Lanka witnessed a multiplicity of attempts to foster reconciliation and reconstruction. Indeed, many of the critics have stressed that institutional recovery was more about reestablishing a semblance of order than about any meaningful inclusion from below.

6.5 Limits of Ethnic Justice Frameworks.

The case of Sri Lanka illustrates that democratic institutions do not guarantee substantive equality. While it is a fact that the postcolonial state possessed mechanisms and modalities of inclusion, these were tempered by majoritarian politics, centralization of state power, and unequal political representation.

7. Comparative Analysis: From Caste to Ethnicity

7.1 Comparing Structures of Inequality

India and Sri Lanka thus present two different yet related types of exclusion in South Asia. While caste- based discrimination is a centuries-old form of social stratification, ethnicity is a modern category created through postcolonial nationalism. Despite these differences, both systems constrain the possibilities of equal representation, dignity, and participation in institutions.

Accordingly, Kalinga Tudor Silva suggested that similar exclusionary mechanisms operate under the names of caste and ethnicity in South Asian countries (Silva, 2005).

7.2 State Responses and Welfare Frameworks

In that regard, the principal response of both states has been to the state as an agent capable of remedying inequalities. Through state welfare regimes, constitutional changes, and institutional reforms, the attempt to curb the various dimensions of exclusion has been made; however, the more structural and intractable inequalities have continued.

7.3 Formal Equality and Substantive Inclusion

The other major issue underlying the two cases concerns the formal equality vs. substantive inclusion debate. It suggests that neither constitutional guarantees nor

democratic institutions are sufficient for ensuring dignity, participation, and institutional recognition.

7.4 Democracy, Identity and Political Mobilization

Democracy has allowed for increased participation and representation in both India and Sri Lanka. However, electoral politics has also often been driven by identity-based mobilization and, thus, communal polarization.

7.5 Rethinking Social Justice in South Asia

These comparative cases of India and Sri Lanka show that social justice in South Asia cannot be defined in terms of economic redistribution or constitutional guarantees alone. Inclusion calls for a much more significant change in the institutional framework to address the historical forms of exclusion.

8. Conclusion and Policy Implications

This chapter argued that caste and ethnicity are among the most significant, enduring forms of exclusion in social justice, representation, and democratic participation in South Asia. These arguments were developed in a comparative perspective on India and Sri Lanka to suggest that while constitutional democracy and welfare state governance represent important measures in the subcontinent, they cannot in themselves eradicate any one of the deeply entrenched axes of structural inequalities.

In this regard, on the one hand, India has witnessed a relatively greater degree of constitutional safeguards and affirmative action leading to enhanced representation and increased access to institutional sites for the historically excluded sections of society. On the other hand, caste-based discrimination and asymmetric social relations persist in an often overt, sometimes subtle manner. It is a case with a different character but not so very different from that of Sri Lanka, where the very nature of state institutions has been carved out through the crucible of ethnic nationalism and majoritarian politics, which, inter alia, determines the extent of inclusion of minorities in the state, the nature of their political participation, and the overall democratic legitimacy of the polity.

The findings show that, while the two may not be comparable categories, caste and ethnicity both stand among the enduring categories of exclusion in their relation to the domains of dignity, representation, and access to state institutions. The democratizing potential of any set of institutions may simultaneously work to enhance the scope of such possibilities while reproducing older exclusionary tendencies on new bases of identity-based mobilization and uneven power relations.

At the same time, the postcolonial state is more ambivalent. While its institutions may sometimes function as sites of protection and inclusion, they are located within a matrix of historical inequalities. Hence, constitutionalism and welfare may ultimately be insufficient without deep institutional accountability and social transformation. From a policy perspective, this points to the need to go beyond symbolic inclusion toward substantive participation and fair access to institutional sites.This calls for effective implementation mechanisms and more inclusive governance in pluralistic democracies of South Asia to embed social justice within their constitutional frameworks. Against this backdrop, the evidence from India and Sri Lanka highlights that social justice in South Asia is a continuously unfolding democratic agenda. Inclusion in this region can never be secured only through constitutional assurances or welfare policies; it must be anchored in the capacity of democratic institutions to address the historical context of inequalities and an ever-growing repertoire of claims to dignity, recognition, and citizenship.

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Chapter 38 :Cancel Culture vs Constitutional Morality: Free Speech, Digital Vigilantism, and the Limits of Private Censorship in India

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Abstract

The emergence of cancel culture and digital vigilantism in India has produced a systematic private suppression of speech that operates entirely outside the disciplinary reach of constitutional law. This development challenges the practical effectiveness of constitutional safeguards under Articles 19(1)(a) and 21 against non-state actors whose coercive capacity increasingly rivals that of the state itself. Although existing scholarship has addressed state censorship and hate speech regulation, it has paid insufficient attention to the horizontal dimension of expressive harm caused by coordinated social and platform-driven sanctions. This paper identifies a significant doctrinal gap in Indian constitutional jurisprudence: the limited recognition of non-state suppression as a cognizable infringement that generates a horizontal chilling effect on free speech. It contends that constitutional morality, as it has evolved in Indian public law, must be extended to the digital sphere to establish normative constraints on private censorship that erodes democratic discourse. Drawing on doctrinal analysis and normative reconstruction of Article 19 jurisprudence, the paper develops the concept of horizontal chilling effect. It further proposes a threshold test, structured around intent, method and foreseeable impact to distinguish protected counter-speech from coercive digital conduct that undermines the constitutional guarantee of free expression. Particular attention is given to the inadequacy of existing intermediary liability frameworks to deal with coordinated reputational injury and algorithmic amplification as a structural driver of digital majoritarianism. The article thereby offers Indian constitutional law a structured analytical framework for mediating the tension between private expressive autonomy and the integrity of public discourse in the digital age.

Keywords: Cancel culture, Constitutional Morality, Private Censorship, India, Digital Vigilantism, Free Speech

Introduction

In today's digitally networked public sphere, cancel culture has emerged as a distinctive and consequential mode of collective response. At its core, it involves the organised withdrawal of social and professional support from individuals or institutions perceived to have transgressed prevailing moral or social norms, a process that platform algorithms routinely intensify by privileging engagement over deliberative exchange. Digital vigilantism is a related but more aggressive phenomenon, arising when dispersed online actors coordinate to monitor, expose, and punish those they target through doxing, public shaming, and sustained efforts to destabilise their professional lives and social standing.

What distinguishes contemporary practice from earlier traditions of social accountability is not the impulse itself but its structural transformation. Expressions of collective disapproval, once sporadic and localised, have become systematised through networked infrastructure. Platform architectures enable grievances to propagate rapidly, to remain visible across time, and to accumulate reach on a scale that was previously inconceivable. Counter-speech, long regarded as the liberal corrective to offensive expression, now frequently mutates into coordinated coercive pressure, generating harms to reputation and livelihood that are neither incidental nor proportionate.

Indian constitutional jurisprudence on free expression, anchored in Article 19(1)(a) and the enumerated reasonable restrictions under Article 19(2), is premised, structurally and doctrinally, upon state action. The Supreme Court's landmark intervention in Shreya Singhal v. Union of India (2015) elaborated robust protections against vague and overbroad state restrictions on speech, insisting on precision, proportionality, and sensitivity to chilling effects. Yet the framework carries a structural limitation that has only grown more consequential with time: it does not account for expressive suppression emanating from non-state actors through coordinated digital conduct. Private platforms, influential online personalities, and organised communities now exercise formidable power over public discourse, largely unconstrained by the constitutional disciplines that bind governmental actors.

This gap acquires heightened significance as digital constitutionalism gains scholarly and institutional traction, as algorithmic architectures amplify emotionally resonant content and entrench majoritarian tendencies, and as public deliberation migrates increasingly into privately owned digital environments. Online majoritarianism, sustained by visibility hierarchies and the insularity of echo chambers, threatens to displace open deliberative culture with something closer to informal punitive governance, where popular sentiment functions as a regulator of acceptable speech and performative sanction substitutes for reasoned engagement.

The central contention of this chapter is that Indian constitutionalism must respond to these structural shifts through three conceptually interrelated moves. A doctrine of horizontal chilling effect ought to be developed, one that formally acknowledges how organised private conduct can, at scale, systematically deter constitutionally protected expression. Constitutional morality, in turn, must be read not as an index of majoritarian sentiment but as fidelity to the foundational values of dignity, equality, and pluralism that the Constitution itself instantiates. Finally, it is necessary to draw a principled and workable distinction between legitimate expressive conduct, including robust counter-speech, and coercive behaviour that crosses into impermissible suppression of protected speech. That distinction is essential both to preserving the liberty that Article 19(1)(a) guarantees and to setting meaningful limits on the censorial potential of private digital power.

Objectives of the Study

Situated at the intersection of constitutional doctrine and digital sociology, this chapter examines a tension Indian constitutional law has yet to fully confront: the rise of cancel culture as informal digital governance and its uneasy relationship with constitutional commitments to free expression and dignity. The animating concern is that digital vigilantism, amplified through algorithmic platform architectures, generates non-state mechanisms of expressive suppression operating entirely outside Article 19(2)'s disciplinary framework.

The study pursues several interrelated objectives. It analyses cancel culture as a regulatory system in which private power is exercised through coordinated shaming, deplatforming, and reputational sanction, functionally replicating formal regulatory authority. It asks whether such conduct constitutes constitutionally cognisable non-state suppression by imposing extra-legal penalties that evade ordinary constitutional safeguards. The chapter also critically appraises Indian doctrine's structural verticality and the limitations this creates when coercive power operates without state involvement.

Drawing on Navtej Singh Johar v. Union of India (2018) and the Constituent Assembly record, the chapter reinterprets constitutional morality as substantive normative commitment rather than majoritarian preference, then develops the concept of the horizontal chilling effect to account for how private digital conduct, at sufficient scale, deters protected expression in ways practically indistinguishable from state suppression. A threshold distinction between protected expression and coercive digital conduct is formulated, alongside a framework for mediating the tension between free speech and dignity.

The contribution operates on several registers. It extends the horizontal application doctrine, reinvigorated by Kaushal Kishor (2023), into digital terrain that has received insufficient doctrinal attention, and enriches digital constitutionalism

scholarship by distinguishing algorithmic amplification of majoritarian pressure from legitimate accountability. Bridging doctrinal analysis with socio-legal theory, the chapter offers courts and regulators a practical framework for engaging private power without endorsing either state overreach or unregulated vigilantism, contributing to broader deliberation on reconstituting public reason within digitally mediated democracy.

Methodology

The study adopts doctrinal and analytical legal research as its methodological foundation. This approach fits the inquiry well because digital constitutionalism and platform governance in India raise questions that are fundamentally interpretive and normative. Understanding how constitutional rights apply to new forms of private power in the digital public sphere requires careful attention to constitutional text, structure, and precedent. Platform governance disputes centre on rights balancing, the limits of state regulation, and the horizontal reach of constitutional values in relation to intermediary conduct. These issues call for close doctrinal examination of legal provisions and judicial decisions rather than quantitative data or fieldwork alone.

Empirical methods can usefully map enforcement trends or user experiences, yet they cannot adequately address the normative gaps at the centre of this study. They provide limited help in determining how constitutional structure should respond to private ordering of expression or in reconciling competing rights within an environment shaped by algorithmic amplification and intermediary liability rules. Doctrinal research, by contrast, allows a systematic reading of the constitutional framework. It helps identify internal coherence, expose tensions, and develop principled ways forward. This method aligns directly with the thesis that Indian constitutionalism needs to evolve so it can confront non-state suppression of speech while remaining faithful to its commitments to dignity, pluralism, and democratic deliberation.

The analysis rests on close engagement with three constitutional provisions: Article 19(1)(a) guaranteeing freedom of speech and expression, Article 19(2) setting out the permissible scope of reasonable restrictions, and Article 21 protecting dignity, privacy, and personal liberty. These are examined together with the intermediary liability framework under Section 79 of the Information Technology Act, 2000 and the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021. The interpretive approach draws particular strength from three Supreme Court judgments. In Shreya Singhal v. Union of India (2015), the Court struck down vague restrictions and established demanding standards against overbreadth and chilling effects. Justice K.S. Puttaswamy (Retd.) v. Union of India (2017) recognised

informational privacy and individual autonomy as fundamental rights. Navtej Singh Johar v. Union of India (2018) offered a transformative reading of constitutional morality rooted in dignity and pluralism, which supplies vital normative resources for rethinking constitutional values in digital settings.

Constitutional theory, digital governance scholarship, socio-legal studies, and platform governance literature are drawn upon where they help clarify specific doctrinal issues, especially horizontal chilling effects and the algorithmic amplification of digital majoritarianism. These materials support the effort to distinguish protected expression from coercive online conduct without displacing the central role of constitutional reasoning. The study involves no empirical fieldwork, surveys, or platform data collection. Its contribution lies in conceptual clarification, greater doctrinal coherence, and theoretical development.

This methodological choice speaks directly to the gap identified in Indian digital constitutionalism: the limited theorisation of how private digital power engages with constitutional values. Rigorous textual and precedential analysis keeps the argument internally consistent while contributing originally to broader debates on the constitutional limits of free expression in the platform age.

Literature Review

Scholarship on cancel culture reflects a pronounced and, in many respects, unresolved polarisation. One strand of the literature treats it as a vital instrument of democratic accountability, particularly where formal institutions have proved inadequate in addressing harms experienced by marginalised communities. Collective online mobilisation, on this view, validates shared grievances and catalyses social change that conventional mechanisms have consistently failed to deliver (Traversa, 2023; Saint-Louis, 2021). A competing body of scholarship foregrounds its pathologies: disproportionate public shaming, the erosion of procedural fairness, and the imposition of extra-judicial sanctions that generate pervasive self-censorship through compounded social and economic pressures (Marsh, 2022). In India, these tensions acquire a distinct character. Digital call-outs frequently map onto entrenched fault lines of caste, religion, and political affiliation, both amplifying historical patterns of censorship and inducing self-restraint among journalists, academics, and artists who anticipate the costs of public exposure.

Digital vigilantism extends and intensifies these dynamics by converting collective outrage into organised, networked enforcement. It functions as a system of extra-legal punishment, harnessing visibility and virality to impose social and professional sanctions that evade the constitutional protections ordinarily available to those subjected to punitive action (Badrinathan, 2025). Indian scholarship has documented

how social media platforms enable crowd-sourced retribution in an environment of low institutional trust, raising serious concerns about misinformation, coordinated harassment, and the emergence of parallel justice systems that bypass the guarantees of fairness embedded in Articles 14, 19, and 21 of the Constitution. Algorithmic amplification accelerates this process considerably, mobilising collective action capable of devastating individual reputations without any evidentiary threshold or procedural constraint.

The chilling effect doctrine occupies a foundational position in free speech jurisprudence. In its traditional formulation, it targets state conduct, particularly vague or overbroad legislation, that indirectly deters protected expression by creating a reasonable apprehension of sanction (Schauer, foundational scholarship; Shreya Singhal v. Union of India, 2015). Indian courts have applied the doctrine selectively; its most conspicuous deployment remains the invalidation of Section 66A of the Information Technology Act. Yet the doctrine has retained a markedly vertical orientation, directed at governmental rather than private conduct (Bansal, 2021). This state-centric emphasis is a significant limitation. The literature has devoted comparatively little attention to horizontal chilling effects generated by private actors, platforms, and digital networks, even as decisions such as Kaushal Kishor v. State of U.P. (2023) intimate a broader potential for the horizontal application of fundamental rights.

Platform governance scholarship illuminates how design choices compound these problems. Algorithms optimised for engagement systematically amplify divisive, high-arousal, and outrage-driven content, creating virality traps and visibility hierarchies that privilege emotional intensity over deliberative exchange (Rathje et al., 2023; Milli et al., 2025). In the Indian context, these mechanisms frequently reinforce digital majoritarianism, entrenching dominant narratives while suppressing dissent through deplatforming, shadow banning, and coordinated campaigns. Digital constitutionalism scholars have consequently advocated embedding rule-of-law principles, transparency requirements, and rights-based oversight into platform regulation, while acknowledging that such frameworks remain conspicuously underdeveloped across the Global South, India included (Suzor, 2019; Kumar, 2024).

Constitutional morality, grounded in Ambedkar's insistence on fidelity to constitutional principles over prevailing social prejudice, provides a potent anti-majoritarian resource. Indian courts have invoked it to sustain dignity, equality, and minority protections against the weight of popular sentiment (Navtej Singh Johar v. Union of India, 2018). Its deployment, however, has remained predominantly vertical and institutional. In the digital public sphere, where private power and algorithmic logics

reconstitute the very conditions of public discourse, constitutional morality's critical potential has yet to be seriously theorised.

Western literature tends to treat cancel culture and digital vigilantism as cultural phenomena amenable to private ordering or counter-speech. Indian scholarship, by contrast, situates them within a broader context of constitutional fragility, institutional weakness, and majoritarian legacy. Three doctrinal lacunae emerge with particular clarity: the absence of a developed horizontal chilling effect doctrine capable of addressing non-state suppression; the lack of principled thresholds distinguishing protected expression from coercive digital conduct; and the inadequate theorisation of constitutional morality as a constraint operative within algorithmically mediated public spaces. This chapter addresses each in turn, developing doctrinal frameworks that align with the anti-majoritarian commitments at the heart of the Indian constitutional project.

Conceptual and Constitutional Framework

Cancel culture operates as an informal governance mechanism within the digital public sphere. Collective social actors enforce normative conformity through coordinated reputational and economic sanctions that operate entirely outside formal legal channels, with a speed and reach that institutional processes cannot approximate. What is at stake here is not episodic public shaming in any ordinary sense but something structurally more consequential: a decentralised system of norm enforcement that exploits platform architectures to deliver rapid, often irreversible, accountability for alleged violations of prevailing social standards.

Digital vigilantism is a sharper and more explicitly punitive expression of this dynamic. Citizens mobilised through social media networks assume the roles of investigator, prosecutor, and judge, functions that constitutional design has traditionally reserved for state institutions (Trottier, 2017). Public discourse, in this configuration, ceases to be a site of deliberative exchange and becomes instead a mechanism of collective punishment.

Three closely linked modalities of sanction sustain the practice. Reputational sanctions operate through the swift amplification of accusations, eroding professional standing and social capital, frequently culminating in deplatforming or organised boycotts. Social ostracism reaches further still, severing interpersonal and community ties and rendering the targeted individual unwelcome across digital and physical spaces alike. Pre-adjudicative punishment is perhaps the most constitutionally troubling feature of all: concrete harms, including loss of employment, sustained harassment, and doxing, are inflicted before any formal finding of fault, effectively inverting the presumption of innocence.

The particular force of these sanctions derives from virality. Algorithmic amplification compresses processes that once unfolded across months within institutional settings into hours of digital mobilisation, collapsing the distinction between adjudication and enforcement under the weight of collective outrage. Classical constitutional frameworks proceeded on the assumption that the principal threats to expressive freedom would emanate from the state, with judicial oversight supplying the necessary procedural correctives. That assumption sits uneasily in the contemporary digital environment. Shifting coalitions of users, influencers, and recommendation algorithms have acquired the effective character of quasi-regulatory authorities, exercising considerable power over visibility, access, and the outer boundaries of permissible discourse. Their community standards frequently exceed the thresholds of constitutionally protected expression, and the concerns this raises regarding legitimacy, accountability, and the entrenchment of digital majoritarianism are not easily dismissed. Temporary majorities, in this setting, can impose substantive moral codes by circumventing established procedural norms entirely.

India's constitutional design, structured around vertically oriented rights, confronts clear doctrinal limitations when faced with non-state forms of expressive suppression. Article 19(1)(a) safeguards freedom of speech and expression as a cornerstone of democratic life, protecting not only the right to communicate ideas but the right to receive them. In Shreya Singhal v. Union of India (2015), the Supreme Court invalidated Section 66A of the Information Technology Act on the ground that its vague provisions chilled online speech in ways that could not be sustained under Article 19(2), which permits reasonable restrictions only on defined grounds such as public order, decency, or morality, and requires that any restriction satisfy standards of proportionality and precision.

Article 19(2), however, operates primarily as a constraint on state action. The vertical character of fundamental rights consequently leaves private and quasi-private censorship, whether by platforms or by digital collectives, largely beyond direct constitutional oversight. Article 21 offers a partial response through its expansive protection of life and personal liberty. Justice K.S. Puttaswamy v. Union of India (2017) located the right to privacy within Article 21, encompassing informational autonomy, dignity, and decisional privacy. Navtej Singh Johar v. Union of India (2018) invoked constitutional morality to protect minority sexual expression from majoritarian moral enforcement, with the Court affirming that fundamental rights cannot be made to yield to transient popular sentiment.

Taken together, these decisions gesture toward a richer conception of constitutional morality, one better adapted to the conditions of the digital public sphere, which elevates pluralism, dignity, and individual autonomy above coerced consensus. Yet the

enduring verticality of rights enforcement leaves a substantial gap. Non-state actors can generate horizontal chilling effects that conventional doctrine is ill-equipped to address. The horizontal chilling effect, as understood here, refers to the self-censorship that arises from the anticipated costs of decentralised digital punishment rather than from direct state pressure. Individuals internalise restrictive norms in anticipation of private sanctions, and this process erodes the marketplace of ideas without triggering the standard Article 19(2) review that state action would ordinarily invite.

Reinterpreted for the digital context, constitutional morality must extend beyond its traditional function as a check on governmental excess. It must establish normative standards for conduct within privately governed digital spaces, requiring that the regulatory authority exercised by platforms and vigilante groups align with the core values of Part III, including respect for dissent and protection against arbitrary reputational harm. The doctrinal limitations of vertical rights, in short, demand serious analytical innovation. Effective protection of expressive freedom in India requires sustained engagement with non-state suppression and, crucially, a principled framework for distinguishing protected expression from coercive digital conduct.

Horizontal Chilling Effect and Digital Majoritarianism

The classical chilling effect doctrine in U.S. First Amendment law tackled rules that were so vague or broad they scared people away from exercising protected speech, even when those rules were never actually enforced. Cases like Lamont v. Postmaster General (1965) and Dombrowski v. Pfister (1965) showed that the mere threat of punishment could silence expression. Indian constitutional law adopted this idea in Shreya Singhal v. Union of India (2015), when the Supreme Court struck down Section 66A of the Information Technology Act. That provision had criminalised “offensive” or “annoying” online speech in vague terms, which led to widespread self-censorship and weakened the protections under Article 19(1)(a).

Traditional doctrine, however, focuses on state action. Under Indian law, Article 19(2) allows restrictions on speech only through reasonable limits imposed by law. This reflects the vertical nature of fundamental rights, which primarily guard against the State as defined under Article 12. As a result, suppression coming from private actors has largely been left unaddressed. In today’s digital public sphere, that gap matters more than ever. Individuals now face pressure from other citizens: viral reputational attacks, coordinated harassment, economic boycotts, deplatforming, and professional blacklisting. Algorithms amplify these actions, making them fast, widespread, and often hard to trace. Many people absorb the risk of online pile-ons and begin to hold back. Protected speech gives way to fear of social consequences rather than any legal ban.

This idea of a horizontal chilling effect offers a necessary extension of the doctrine. It covers situations where widespread private behaviour, when systemic and disproportionate, creates the same deterrent effect on Articles 19(1)(a) and 21 rights as state coercion once did. The Supreme Court has already shown willingness to move in this direction. In Kaushal Kishor v. State of Uttar Pradesh (2023), it recognised that fundamental rights can place obligations on non-state actors and that the State must protect citizens from private violations. This builds on earlier decisions such as Vishaka v. State of Rajasthan (1997). The American parallel in New York Times v. Sullivan (1964) constitutionalised parts of private defamation law to protect public discussion. When digital platforms and networked groups become the real gatekeepers of speech, ignoring private power makes constitutional promises largely formal and ineffective.

A recent Indian example shows what is at stake. Journalist Rana Ayyub faced prolonged online harassment involving doxing, rape threats, and organised boycotts of her work. These attacks did not come from the State, yet they created a climate of fear that discouraged not only her but many other journalists and commentators from tackling sensitive political and religious topics. The case illustrates how horizontal pressures can systematically chill core political speech without any formal government involvement.

Constitutional morality provides an important counter to such digital majoritarianism. As the Supreme Court explained in Navtej Singh Johar v. Union of India (2018), constitutional morality is grounded in dignity, equality, and pluralism, not in temporary numerical majorities. Applied in the horizontal context, it calls for examining how algorithmic crowds enforce speech codes through reputational attacks instead of open debate. These networked majorities recreate the very tyranny the Constitution was designed to prevent, turning digital spaces into arenas of coercion against minorities and dissenters.

Critics are right to warn that expanding rights horizontally could blur the line between public and private, lead to excessive judicial interference in everyday social life, or discourage legitimate criticism and accountability. Those concerns are genuine. The horizontal chilling effect approach does not treat every critical comment or boycott as a constitutional violation. It requires careful assessment: clear evidence of systemic suppression of protected speech, impact that is disproportionate to any legitimate interest, and a clear distinction between coordinated harassment or doxing on one side and normal public criticism or voluntary association on the other. Proportionality review, along with the State's positive duty to regulate platform governance, can prevent overreach. Without this kind of development, however, constitutional rights

risk becoming empty in an age when private actors control the infrastructure of public discourse.

Free Speech Versus Digital Coercion

Article 19(1)(a) of the Indian Constitution guarantees freedom of speech and expression. It is one of the cornerstones of our democracy, and this protection naturally extends into the digital world too. Yet the sharp rise of digital vigilantism means we now need a much clearer boundary between real protected speech and coercive private power that ends up silencing people. Criticism, dissent, satire, and even calls for boycott add real value to public debate and should generally stay protected. What crosses the line is harassment, doxing, coordinated intimidation, and deliberate campaigns to destroy someone's reputation. These are not contributions to discussion. They act like private punishments that scare people into silence rather than encouraging genuine conversation. This difference carries real constitutional importance. Indian courts have always stood up for even harsh or offensive criticism of public figures and policies, provided it does not incite immediate violence. Boycotts aimed at ideas or practices, rather than at ruining an individual's life, remain a legitimate form of collective action. Satire and strong dissent continue to serve essential democratic roles.

The trouble begins when expression turns into sustained abuse, leaking of private information, threats, or systematic social and professional isolation. At that stage it stops being speech and becomes coercion. It bypasses due process, hurts the dignity protected under Article 21, and creates a wider chilling effect that damages the entire digital public sphere. Our current legal tools have serious limitations. The Shreya Singhal judgment struck down Section 66A for being vague, but it mainly dealt with government action. The IT Rules 2021 focus on intermediaries and official orders. Purely private coordination among groups often escapes scrutiny unless it qualifies as defamation or criminal intimidation under the Bharatiya Nyaya Sanhita. The idea of horizontal application of fundamental rights is still developing, though courts are slowly recognizing that private actors can also undermine basic freedoms.

A practical threshold test drawn from existing case law could help bridge this gap. It would rest on three simple elements: intent, method, and impact. Intent examines whether the person or group is truly seeking accountability or is instead hunting for personal revenge outside the law. Method looks at whether they are using lawful criticism, petitions, and boycotts or resorting to doxing, threats, and platform manipulation. Impact considers the actual or likely harm, including the scale, persistence, and broader chilling effect on free expression, guided by the proportionality principles from cases like Anuradha Bhasin and the privacy reasoning in Puttaswamy. Take coordinated trolling against journalists who criticize government

policy. Reasonable counter arguments or boycott calls should remain protected. But when the same groups start doxing family members, flooding employers with threats, and relentlessly pushing hashtags to wreck careers and livelihoods, the campaign clearly turns coercive and loses any constitutional shield. The same applies to outrage campaigns targeting comedians or filmmakers. Open public criticism is acceptable, but when it shifts into organized pressure through fake complaints and intimidation of platforms and venues, it moves beyond debate into coercion.

Courts and regulators must apply any such test with real humility. There is always a danger of mistaking strong dissent for harmful coercion, which could end up weakening Article 19(1)(a) itself. Any response, whether through clearer laws, better due process for platforms, or stronger judicial recognition of horizontal rights, needs to stay narrowly tailored and proportionate. Platforms too have a responsibility. They should fix design features that encourage and spread this kind of toxic behavior. But they should never become the final judges of truth or acceptable speech. Getting this balance right is not easy, but it is essential if we want our digital spaces to remain open, free, and truly democratic.

Platform Responsibility and Regulatory Gaps

India's intermediary liability regime is primarily built around Section 79 of the Information Technology Act, 2000. This provision offers conditional safe harbour protection to online platforms for content posted by third parties. The protection applies only as long as the platforms function as passive intermediaries, follow due diligence requirements, and take down unlawful material quickly once they receive actual knowledge of its existence. In the landmark 2015 judgment in Shreya Singhal v. Union of India, the Supreme Court made it clear that such knowledge should normally come through a court order or an appropriate notification from the government.

The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 introduced several additional obligations, especially for significant social media intermediaries. These include setting up grievance redressal mechanisms, enabling conditional traceability of messages in certain cases, and taking proactive steps against specified categories of harmful content. Although these measures represent an attempt to strike a balance between fostering innovation and ensuring greater accountability, the overall framework still struggles to keep up with the speed and scale of coordinated digital attacks that have become common today.

At the centre of the problem are the recommendation systems used by platforms. These algorithms are built to maximise user engagement and advertising revenue. As a result,

they tend to give greater visibility to content that stirs strong emotions such as outrage, anxiety, or moral indignation. What may start as a single individual post can quickly spread through personalised feeds and various ranking signals. In this way, a private expression is often transformed into a form of collective pressure. The architecture of these platforms does not simply host speech; it actively shapes how far that speech travels and what impact it ultimately has.

The reactive nature of the current regime makes the challenge even greater. Takedown requests and grievance processes usually come into play only after the content has already spread widely. By that time, it is often too late to prevent serious reputational harm from taking root. Coordinated campaigns take full advantage of this delay. Through mass reporting, hashtag campaigns, and algorithmic amplification, they can achieve their goals within a matter of hours. Victims are frequently left to bear the damage long before any effective institutional response can be mounted. Even the expedited timelines introduced in the 2021 Rules offer only limited protection against the rapid pace at which such content travels.

One clear example of this dynamic can be seen in the coordinated online campaigns that have targeted certain journalists and academics who have been critical of majoritarian policies. These efforts, often driven by hashtags and accompanied by large numbers of complaints and reports, have led to temporary account suspensions and widespread doxxing. This has happened even when the original content involved legitimate questions of public interest. Such incidents highlight the tension with the protections guaranteed under Article 19(1)(a) of the Constitution. They also show how platforms' incentives to drive engagement can sometimes result in outsourcing censorship to organised online majorities, thereby bypassing important constitutional safeguards.

Significant regulatory gaps persist. Neither the IT Act nor the 2021 Rules currently mandate meaningful algorithmic transparency, require ex ante risk assessments for features likely to generate high engagement, or encourage design changes that could reduce foreseeable harms from amplification. Jurisdictional issues add another layer of difficulty, as global platforms may push back against domestic orders citing extraterritorial concerns. At the same time, the fear of legal liability can push platforms toward excessive content removal. This over-compliance creates the very chilling effect on free speech that constitutional principles are meant to prevent.

Meaningful reform will require a more fundamental shift in how we think about platform responsibility. Accountability should reflect the active role that platforms play in curating, ranking, and propagating content, rather than continuing to treat them merely as neutral conduits. Unless we introduce targeted measures that address the dynamics of amplification and the realities of coordinated coercion, digital vigilantism

is likely to keep undermining constitutional values. This erosion happens through the combined influence of opaque commercial incentives and the pressure exerted by online mobs.

Conclusion and the Way Forward

This chapter has demonstrated that when cancel culture manifests itself through digital vigilantism and coordinated private censorship, it creates a horizontal chilling effect. This phenomenon quietly undermines the constitutional guarantee of free speech under Article 19(1)(a). Traditional state-centric constitutionalism has proven strong when dealing with actions by the government itself. However, it shows clear structural limitations when confronted with powerful non-state actors who exercise coercive influence at scale, particularly through the mechanisms of algorithmic amplification.

Organised campaigns involving harassment, doxing, and sustained pressure on platforms are fundamentally different from ordinary expressions of dissent. Rather than contributing to healthy debate, these campaigns operate as forms of private coercion. In doing so, they endanger the very pluralism that the Indian Constitution seeks to safeguard. The concept of the horizontal chilling effect offers a valuable doctrinal bridge in this context. It enables constitutional analysis to extend to private conduct that generates widespread self-censorship, even in the absence of direct state involvement. Building on this understanding, Indian free speech jurisprudence needs to evolve beyond the framework laid down in Shreya Singhal v. Union of India (2015). It must now account for the quasi-public functions performed by major digital platforms and the complex public-private interactions that increasingly define the digital sphere.

Courts, regulators, and platforms themselves each have important yet distinct roles to play in this process of recalibration. Courts should be willing to recognise the horizontal chilling effect in suitable cases. They could apply a structured proportionality analysis, asking petitioners to show evidence of coordinated private action, foreseeable damage to public discourse, and the inadequacy of existing platform remedies. Such an approach could draw productively from the principles discussed in Kaushal Kishor v. State of Uttar Pradesh (2023).

Regulators, on the other hand, need to ensure that platforms fulfil robust due process obligations. This would include introducing standards for algorithmic transparency in content moderation and putting in place safeguards against the abuse of coordinated reporting systems. At the same time, all such interventions must remain firmly anchored within the permissible grounds listed under Article 19(2). For their part, digital platforms bear a responsibility to establish independent oversight mechanisms and faster review processes for contested content decisions. These

measures would help preserve legitimate forms of private ordering while preventing the systemic erosion of individual expressive autonomy.

Taken together, these steps do not seek to eliminate private power in the digital realm. Instead, they aim to calibrate it in line with constitutional standards. In the end, genuine freedom of expression in India's digital public sphere will depend on sustained institutional vigilance. This vigilance must protect the conditions necessary for meaningful dissent, especially in the face of growing algorithmic pressures. Such a measured evolution reflects the Constitution's character as a living instrument, one that remains responsive to emerging threats while staying true to its foundational commitments to human dignity and reasoned pluralism.

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Chapter 39 :AI in Higher Education Is 'Not a Student Problem': Reframing Knowledge, Ethics, and Fluency in the Age of AI

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Abstract

This chapter introduces the 'Six Domains for AI Fluency in Higher Education'; an interdisciplinary framework designed to move beyond narrow, student-centric or compliance-driven narratives surrounding artificial intelligences' role(s) in academia. Rather than positioning AI as a tool to be controlled, this chapter reframes it as a catalyst for a broader transformation in how knowledge is produced, governed, legitimised, and mobilised across the higher education ecosystem. Drawing on perspectives from the humanities and social sciences, the framework identifies six interconnected domains through which AI fluency is shaped and enacted: learners, educators, workforce expectations, institutional systems, societal leadership, and the knowledge and publishing ecosystem. Together, these domains provide a holistic view of AI as a socio-technical phenomenon that extends beyond classrooms into the structures that define academic legitimacy, authorship, and access to knowledge. The chapter places particular emphasis on the ethical implications of AI integration, including questions of authorship, transparency, equity, and the amplification of existing global inequalities in knowledge access – especially for scholars in the Global South. In doing so, it highlights the risks of fragmented or reactive institutional responses that fail to engage with the full complexity of the AI ecosystem. Central to the argument is the need for sustained institutional investment in AI literacy and training – not only for students, but for educators and academic leaders. Such investment is positioned as a critical mechanism for aligning stakeholders, supporting responsible and context-aware AI use, and enabling higher education institutions to move from reactive governance toward proactive, informed engagement. Ultimately, the chapter presents the Six Domains Framework as both an analytical tool and an open invitation for further development. It argues that meaningful AI fluency will not emerge from isolated interventions, but from coordinated, ethically grounded engagement across the entire academic ecosystem.

Keywords

AI Fluency, Higher Education, Knowledge Production, Education Futures, Institutional Governance, Ethics & Equity, Knowledge Ecosystem.

Introduction

The rapid emergence of artificial intelligence (AI) within higher education has generated widespread debate concerning academic integrity, assessment security, authorship, and the future role of universities in digitally mediated societies. Much of this discourse, however, has been framed through a narrow and frequently reactive lens — one that positions students as the primary site of concern and AI itself as a problem to be controlled (Song, 2024; Sweeney, 2023). Yet universities themselves are increasingly integrating AI across broader institutional operations, including enrolment management, administration, staffing, analytics, governance processes, and beyond.

Institutional responses to date to AI have largely focused on plagiarism detection, policy restriction, assessment redesign, and questions of misuse, often without sufficient consideration of the broader structural, pedagogical, and epistemological transformations AI is introducing across the wider higher education ecosystem (Almosiamani, 2025; An, et al, 2025; Buriak et al, 2023; Dabis and Csaki, 2024; Valdivieso and Gonzalez, 2025;)

This chapter proposes that AI in higher education is fundamentally 'not a student problem'. Rather, it represents a systemic challenge extending across institutional governance, workforce expectations, pedagogical practice, knowledge production, ethical leadership, and the evolving relationship between universities and society (Crawford and McGuire, 2026; Marcinkevage and Kumar, 2025). While concerns surrounding academic integrity remain steadfastly important, an over-emphasis on surveillance and compliance risk obscuring deeper questions regarding how knowledge is created, legitimised, distributed, and applied within increasingly AI-mediated environments.

The emergence of generative AI technologies has exposed significant tensions within higher education systems. Universities are expected to prepare graduates for AI-enabled workplaces while frequently lacking shared institutional understanding of what responsible or meaningful AI engagement means and should involve. Educators are increasingly required to redesign assessments, adapt pedagogical practices, and guide students through rapidly evolving technological environments, often without sustained institutional support or professional development. Concurrently, institutional

leaders must balance innovation, public trust, ethical accountability, and governance. This task is made harder by the speed of technological change, which often outpaces institutional response. (Aslam et al, 2026; Hedquist et al, 2025; Parker and Becker, 2026; Yin et al, 2025; Zhang and Ali, 2025).

These tensions extend beyond teaching and learning. AI is reshaping the broader knowledge ecosystem within which universities operate, including publishing, peer review, authorship, research visibility, and access to information. Questions surrounding transparency, intellectual ownership, bias, and the amplification of existing inequalities particularly those affecting scholars and institutions within the Global South increasingly challenge traditional assumptions regarding academic legitimacy and authority (Munsch, 2025; Nakazawa et al, 2022).

This chapter introduces the Six Domains for AI Fluency in Higher Education framework as a means of understanding these interconnected dynamics. The framework proposes that meaningful AI fluency emerges through the fluid relationship of six interconnected domains: learners, educators, workforce expectations, institutional systems, societal and leadership responsibilities, and the broader knowledge ecosystem. Collectively, these domains provide a holistic framework for examining AI's impact on higher education. They position AI as a catalyst for institutional and epistemological transformation.

Drawing upon sustained professional engagement across higher education contexts during this period of rapid AI adoption, the chapter adopts a practice-informed and conceptually oriented approach. Its purpose is not to provide definitive empirical conclusions regarding AI adoption across the sector, but rather to offer an interpretive framework capable of supporting institutional reflection, dialogue, and future research.

Central to this discussion is the proposition that universities must move beyond reactive governance models towards more integrated and ethically-grounded approaches to AI engagement. AI fluency, in this sense, becomes less about technological mastery and more about cultivating critical judgment, contextual awareness, ethical responsibility, and institutional coherence within increasingly complex digital environments.

Ultimately, AI fluency is positioned as an ecosystemic challenge requiring coordinated engagement across the full spectrum of higher education stakeholders. The future of AI in higher education will be shaped by the extent to which institutions are willing to rethink their assumptions regarding knowledge, learning, authority, and the broader social responsibilities of higher education itself.

Approach and Evidentiary Basis

This chapter adopts a practice-informed and conceptually oriented approach to examining the emergence of artificial intelligence (AI) within higher education. Rather than presenting a large-scale empirical study, the chapter draws upon sustained professional engagement across higher education environments during this period of accelerated institutional exposure and attention to generative AI technologies. The framework proposed here is best understood as conceptually led, but informed through ongoing institutional observation, professional interaction, and targeted qualitative insight.

The development of the Six Domains for AI Fluency in Higher Education framework emerged iteratively through repeated engagement with academic leaders, educators, doctoral candidates, institutional support units, and broader professional networks involved in navigating AI integration within university contexts, particularly across Global South environments. These engagements occurred across multiple domains of practice, including academic development, postgraduate supervision, curriculum and assessment discussions, institutional advisory work, professional training activities, and broader strategic conversations relating to AI governance and capability building.

Collectively, these interactions revealed recurring patterns of uncertainty, fragmentation, opportunity, and tension across the higher education ecosystem. Early observations of institutional responses to generative AI highlighted a persistent tendency to frame AI primarily as a challenge of student misuse or academic misconduct. Ongoing engagement unveiled that these concerns represented only one component of a much broader transformation affecting higher education systems.

Through an iterative process of conceptual synthesis, six recurring domains consistently emerged within discussions surrounding AI capability, preparedness, governance, ethical responsibility, and institutional adaptation. This subsequently evolved into the six interconnected domains presented in this chapter: learners, workforce expectations, institutional systems, educators, societal leadership, and the knowledge ecosystem.

To strengthen the practical grounding of the framework, the chapter also incorporates targeted qualitative reflections from senior academic and institutional stakeholders engaged in AI-related decision-making and implementation. These reflections were not gathered through a formal interview-based research design, and are not presented as conventional empirical findings. Instead, they function as qualitative, practice-based engagements that helped surface recurring institutional concerns, interpretive patterns, and areas for further inquiry. Participants included individuals involved in institutional leadership, academic management, curriculum oversight, educational innovation, and policy development.

These qualitative engagements were used primarily as sensitising and interpretive inputs rather than as a formal dataset. They informed the identification of recurring themes, tensions, and institutional patterns across the six domains, but were not intended to generate representative or generalisable findings. The chapter therefore adopts a reflective, practice-informed methodology consistent with exploratory conceptual work. It draws on professional experience, stakeholder dialogue, and interdisciplinary synthesis to develop a framework for further inquiry.

Methodologically, the chapter aligns most closely with interpretive and exploratory traditions within the humanities and social sciences. Its purpose is not to provide predictive or universally representative conclusions regarding AI adoption, but rather to offer an interpretive framework capable of supporting institutional reflection, interdisciplinary dialogue, and future research during a period of rapid technological and organisational change.

The framework should therefore be understood as an evolving conceptual model intended to support ongoing discussion surrounding AI, ethics, governance, and institutional transformation within higher education.

AI Fluency as a Socio-Technical and Institutional Concept

Discussions surrounding artificial intelligence (AI) in higher education are frequently framed through the language of tools, platforms, and technological capability. Institutional conversations often focus on what AI can do, whether its use should be permitted, and how it could be regulated. While such concerns are logical, they risk reducing AI to a purely technical phenomenon and overlooking the broader institutional, pedagogical, ethical, and epistemological transformations currently reshaping higher education.

This chapter argues that AI fluency should not be understood as simply the ability to operate AI tools effectively. AI fluency represents a broader socio-technical and institutional capability, encompassing critical judgment, contextual understanding, ethical reasoning, and the ability to navigate increasingly complex relationships between humans, technologies, and knowledge systems.

The distinction between competency and fluency is important. Competency often implies procedural skill acquisition and task completion. Fluency, however, suggests adaptability, interpretation, responsiveness, and meaningful engagement within changing environments. AI fluency thus involves understanding how to use AI systems, as well as when, why, and under what conditions their use may be appropriate, ethical, or educationally valuable.

This distinction is particularly significant within higher education because universities are fundamentally concerned with the production, validation, dissemination, and preservation of knowledge. The emergence of AI raises questions extending into the foundations of academic practice itself, including authorship, originality, transparency, trust, and legitimacy, amongst others.

AI also exposes significant institutional tensions. Universities are expected to prepare graduates for increasingly AI-mediated workplaces, while many institutional systems, governance structures, and pedagogical practices continue to evolve unevenly in response to rapid technological development. Institutional responses frequently remain fragmented, with academic integrity units, teaching and learning centres, information technology divisions, and leadership structures often approaching AI from different operational perspectives.

These dynamics highlight why AI fluency cannot be understood as residing within any single stakeholder group. It is not solely a student issue, nor exclusively a pedagogical or technological challenge. Rather, AI fluency emerges through the interaction(s) between learners, educators, institutional systems, leadership cultures, workforce expectations, and knowledge ecosystems.

This interconnectedness reflects the fundamentally socio-technical nature of AI integration. Technologies both shape and are shaped by the environments within which they are embedded. Decisions concerning assessment, publishing, governance, academic integrity, and institutional policy are therefore never purely technical. They also shape how knowledge and legitimacy are constructed within academia.

AI fluency should therefore be understood as an ecosystemic capability emerging through alignment across multiple institutional and societal domains. Meaningful AI engagement cannot be achieved through isolated policy interventions, technical workshops, or student-focused compliance mechanisms alone. Instead, it requires coordinated institutional reflection on AI's effects on knowledge, learning, labour, governance, and public responsibility within higher education.

The Six Domains for AI Fluency in Higher Education framework presented in the following section is intended to support this broader understanding. By examining AI through the interconnected perspectives of learners, workforce expectations, institutional systems, educators, societal leadership, and the knowledge ecosystem, the framework seeks to move beyond narrow technological narratives toward a more holistic interpretation of AI as a transformational force within higher education.

The Six Domains Framework

The Six Domains for AI Fluency in Higher Education framework proposes that AI fluency is an interconnected institutional and ecosystemic capability rather than an individual technical skill. Responsibility for AI engagement does not sit with any one stakeholder group. Instead, it emerges through the interaction of multiple actors, systems, and expectations shaping how AI is interpreted, governed, adopted, and normalised within higher education.

The framework identifies six interconnected domains through which AI fluency can be examined: the learner lens, the workforce lens, the systems lens, the educator lens, the societal and leadership lens, and the knowledge ecosystem lens.

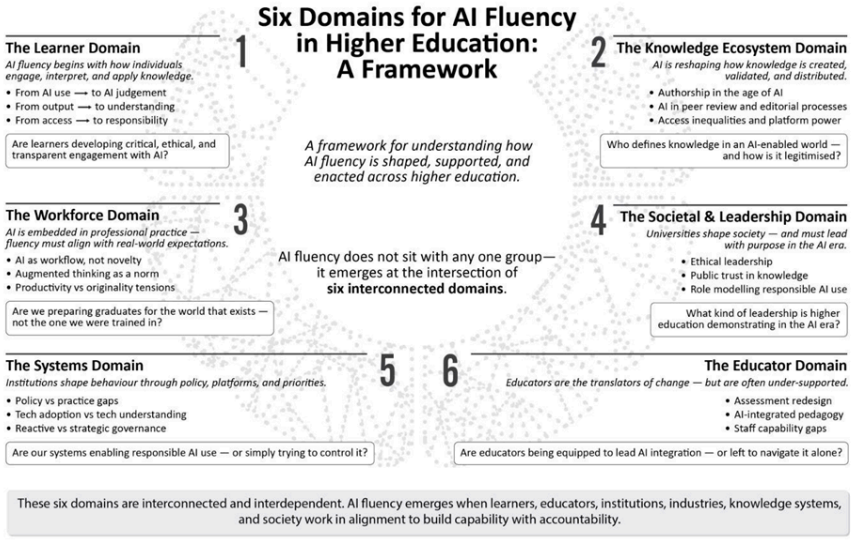


Figure 1: Six Domains for AI Fluency in Higher Education: A Framework. [Source: Author]

The Learner Domain

The learner domain begins with students, who have often been placed at the centre of AI debates in higher education. Much institutional discussion has focused on concerns surrounding academic misconduct and assessment integrity. While these concerns are legitimate, an overly narrow focus on misuse risks reducing learners to objects of suspicion rather than recognising them as participants in rapidly changing knowledge environments.

From this perspective, the key question becomes how and are students developing the ability to evaluate, question, verify, and responsibly apply AI-generated outputs. AI fluency for learners requires critical engagement with the limitations, biases, affordances, and ethical implications of AI systems.

Students must develop skills to move beyond passive output consumption toward informed judgment and reflective engagement. Universities have a responsibility to train students how to engage with AI critically, transparently, and ethically, and not just to regulate AI usage.

The learner domain also foregrounds issues of equity. Students do not encounter AI from equal starting points. Differences in technological access, language confidence, educational background, and financial resources shape how learners engage with AI systems. AI fluency therefore must also be understood as a question of educational justice.

The Workforce Domain

The workforce domain examines the relationship between AI fluency and graduate preparedness. AI tools are increasingly embedded across professional environments, including communication, administration, research, design, analytics, and decision-making processes. Graduates entering these environments are expected to use AI tools, as well as to understand their limitations, ethical implications, and appropriate applications.

This creates tension for universities. Institutions remain concerned about academic authenticity while simultaneously preparing graduates for workplaces where AI-supported productivity is sufficiently normalised. If higher education responds primarily through restriction and avoidance, it risks preparing students for academic environments disconnected from the demands of contemporary professional realities.

The workforce domain argues that universities must move beyond simplistic debates regarding whether students should use AI and instead focus on how students develop professional judgment within AI-mediated environments. Graduates need to understand how to work with AI responsibly rather than becoming dependent upon it.

This also has implications for curriculum and assessment design. AI fluency cannot be treated as a generic digital skill detached from disciplinary context. The ethical and professional implications of AI vary significantly across fields such as law, medicine, journalism, education, business, engineering, and the humanities. Universities now require discipline-specific approaches to AI engagement.

The Systems Domain

The systems domain shifts attention from individuals toward the institutional structures shaping AI engagement. Universities are complex organisations composed of policies, governance arrangements, technologies, professional services, leadership cultures, and academic traditions. AI adoption is mediated through these systems, which determine what forms of engagement are encouraged, restricted, resourced, or ignored.

Institutional responses to AI have typically been reactive, focusing heavily on misconduct, detection, and compliance. While such responses may address immediate concerns, they often reveal deeper gaps in institutional preparedness. Policies may be introduced before shared understandings exist. Guidance may vary across departments. Educators and students may receive inconsistent messages. It also contradicts in many cases universities' use of AI across all other functions and operations.

The systems domain asks whether institutional systems are enabling responsible AI engagement or simply attempting to control it? Control-oriented approaches privilege surveillance and restriction. Enabling approaches recognise that governance must be accompanied by capability development, pedagogical support, ethical reflection, and institutional learning.

This domain also highlights the importance of institutional coherence. AI-related decisions are frequently dispersed across multiple institutional units, creating fragmented governance structures and inconsistent experiences and awareness for staff and students. AI fluency at the institutional level therefore requires coordination, communication, and shared responsibility.

The Educator Domain

The educator domain focuses on academic staff as central mediators of AI engagement within higher education. Educators are expected to maintain academic standards, redesign assessments, guide students through ethical questions, interpret institutional policy, and adapt pedagogical practice within rapidly changing technological environments.

Yet many educators are being asked to perform this work without sufficient institutional support, training, workload recognition, or professional development. Preparedness remains uneven at best. Some educators have engaged enthusiastically with AI, while others remain cautious, uncertain, or overwhelmed.

The educator domain therefore asks whether academic staff are being sufficiently equipped to lead AI integration or left to navigate it alone. This matters because

educators shape how students experience AI within learning environments. They determine how AI is discussed, how expectations are communicated, and how responsible engagement is modelled.

Assessment redesign represents one of the most immediate challenges. Generative AI has exposed vulnerabilities in assessment approaches heavily reliant on unsupervised written outputs. However, effective AI-responsive pedagogy requires time, expertise, institutional support, and opportunities for professional learning. Without such investment, calls for innovation risk becoming another form of intensified academic labour.

Ultimately, this domain positions educators as essential agents of responsible institutional transformation, yet, many are not ready to embrace this role.

The Societal and Leadership Domain

The societal and leadership domain highlights the broader responsibilities of universities in the AI era. Higher education institutions do not exist solely to deliver qualifications or respond to labour market demands. They are also public knowledge institutions with ethical, civic, and social responsibilities.

Institutional leaders are increasingly required to make decisions about AI under conditions of uncertainty. These decisions ultimately communicate institutional values. Whether universities approach AI through fear, opportunism, experimentation, or ethical responsibility shapes organisational culture and public trust, and how stakeholders view the university as a component of society.

A major challenge within this domain concerns the gap between symbolic and substantive leadership. Public commitments to innovation may coexist with limited staff development, fragmented governance, or under-resourced support systems. Responsible leadership therefore requires significantly more than rhetorical recognition of AI's importance. It requires sustained investment, institutional coordination, and ethical reflection.

This domain also emphasises the extensive role of universities within wider society. AI is reshaping public knowledge environments through misinformation, synthetic media, automated content production, and algorithmic mediation. Universities therefore have a responsibility to also contribute critically to public understanding and ethical debate(s).

The societal and leadership domain positions AI fluency as a matter of institutional purpose and public responsibility rather than merely operational adaptation.

The Knowledge Ecosystem Domain

The knowledge ecosystem domain extends discussion beyond teaching and governance into the wider systems through which academic knowledge is produced, validated, circulated, and legitimised. AI is increasingly shaping publishing, peer review, research communication, authorship, literature discovery, and scholarly visibility.

This domain asks who defines 'knowledge' in AI-mediated environments, and how that knowledge becomes legitimised. Generative AI complicates traditional assumptions regarding authorship, originality, transparency, and scholarly contribution. If AI contributes to the production of academic text, universities and publishers must reconsider how authorship and disclosure are made and understood.

The knowledge ecosystem domain also spotlights issues of access and inequality. AI can support multilingual scholarship, improve accessibility, and reduce barriers for researchers operating outside dominant English-language academic centres and those in the Global North. At the same time, uneven training datasets may reinforce existing inequalities by privileging already-visible scholarship, institutions, languages, and epistemic traditions.

These concerns are particularly significant for scholars (and institutions) within the Global South. AI-mediated systems risk amplifying existing exclusions if dominant publishing infrastructures and datasets continue to privilege knowledge production in / from the Global North.

Ultimately, this lens returns the discussion to the core purpose of the university: the stewardship of knowledge. If AI changes how knowledge is produced, discovered, and trusted, then universities cannot treat AI as merely a teaching-and-learning issue. It becomes central to academic legitimacy itself.

Interdependence Across the Six Domains

Although each domain highlights a distinct element of AI fluency, the framework's central contribution lies in emphasising their interdependence. Learner behaviour is shaped by educator guidance, institutional systems, assessment design, and society and industry expectations. Educator practice is influenced by leadership cultures, governance structures, workload models, and professional development opportunities. Knowledge production is shaped by publishing systems, technological infrastructures, and broader social inequalities.

This interconnectedness helps explain why fragmented institutional responses frequently fail. Universities may introduce AI policies without supporting educators to

redesign assessment. Institutions may encourage AI readiness while maintaining governance cultures rooted primarily in restriction and surveillance. Students may be expected to engage responsibly with AI despite inconsistent guidance across programmes and disciplines.

The framework therefore encourages a shift from intervention thinking toward ecosystem thinking. Rather than asking what single policy or technology can solve AI-related challenges, universities must instead ask how institutional structures, relationships, incentives, and values interact to shape positive and ethical AI engagement on multiple levels and scales.

AI fluency is not achieved solely through student training or institutional policy. It emerges through alignment across learners, educators, leadership, governance systems, workforce, and knowledge ecosystems. This is why AI in higher education cannot be understood as a student problem alone. It is an ecosystemic transformation requiring coordinated and ethically grounded institutional engagement.

Of importance is that the framework does not suggest that universities should seek total consensus regarding AI. Disagreement, experimentation, and critical debate are essential components of academic life. Institutions require structures capable of supporting informed disagreement rather than fragmented uncertainty. AI fluency in higher education depends upon the ability of institutions to create environments where stakeholders can engage critically, transparently, and collaboratively with technological change.

The *Six Domains for AI Fluency in Higher Education* framework offers a possible pathway towards this coherence. By recognising the interdependence of the domains, the framework encourages universities to move beyond isolated intervention(s) and towards more integrated, ethically grounded, and institutionally reflective approaches to AI engagement.

Limitations and Future Research

The Six Domains for AI Fluency in Higher Education framework has been laid out as a practice-informed and conceptually oriented model for understanding and (re)thinking AI within higher education. The framework is exploratory rather than empirically definitive, and emerges primarily from sustained professional engagement, institutional observation, and interdisciplinary reflection.

Consequently, the framework reflects particular institutional experiences and higher education contexts rather than universally representative conditions across the global

higher education sector. The discussion should thus be understood as interpretive and developmental, rather than generalisable.

The pace of technological change also represents an important limitation. AI technologies, governance approaches, and institutional responses continue to evolve unevenly and often, not in conjunction. Thus, the framework must be treated as adaptive and evolving rather than fixed.

Despite these limitations, the exploratory nature of the framework also represents one of its strengths. Higher education institutions currently operate within conditions of uncertainty, experimentation, and transition. Conceptual frameworks capable of supporting institutional reflection and interdisciplinary dialogue therefore remain valuable to stakeholders.

Future research may build upon this framework. More detailed and comparative studies across institutional and disciplinary contexts can help identify patterns of AI preparedness, governance alignment, and capability development. Additional research examining educator experiences, workload implications, disciplinary differences, and student understandings of ethical AI engagement would also contribute meaningfully to institutional planning.

Inquiry into AI-assisted scholarship, publishing ethics, multilingual knowledge production, and epistemic inequality is especially important, particularly in relation to scholars and institutions operating within the Global South.

Ultimately, the Six Domains Framework should be understood as an open contribution to ongoing conversations regarding AI, ethics, governance, and institutional transformation within higher education.

Conclusion

The rapid emergence of artificial intelligence within higher education has generated significant institutional concern, particularly regarding academic integrity, assessment authenticity, and student misuse. While these concerns remain important, this chapter has argued that framing AI primarily as a student problem fundamentally underestimates the scale and complexity of the transformation currently confronting universities.

AI doesn’t just introduce new tools into existing educational environments; it is reshaping how knowledge is produced, interpreted, governed, communicated, and legitimised across the broader higher education ecosystem.

Central to this discussion is the recognition that AI fluency cannot be reduced to technical competence alone. Meaningful engagement with AI requires critical judgment, ethical reasoning, contextual awareness, institutional coherence, and the ability to navigate increasingly complex relationships between technologies, knowledge systems, and social structures.

The Six Domains for AI Fluency in Higher Education framework was introduced as a means of making these interconnected dynamics visible. By exploring AI through the perspectives of learners, workforce preparedness, institutional systems, educators, societal leadership, and knowledge ecosystems, the framework moves beyond fragmented or compliance-driven narratives towards a more holistic understanding of AI as a socio-technical and institutional phenomenon.

The chapter has argued that fragmented institutional responses frequently fail because AI cuts across every major dimension of university life. Policies developed without pedagogical support create uncertainty. Calls for innovation without investment in educator capability generate institutional strain. Expectations of student responsibility without shared institutional understanding undermine trust.

Universities must curate more than isolated interventions. Coherent institutional cultures capable of responding thoughtfully, ethically, and adaptively to technological transformation are what is essential.

Interestingly too, AI presents higher education with an opportunity. Although generative AI disrupts established assumptions, it creates possibilities for rethinking learning, accessibility, interdisciplinary inquiry, and global participation within knowledge systems.

The future of AI in higher education will not be determined solely by technological capability, but by the choices institutions make regarding how these technologies are interpreted, governed, and integrated into academic life. The challenge for universities is therefore not simply to adapt to AI, but to determine what forms of higher education they wish to preserve, transform, or reimagine in response to it.

Practically, the Six Domains Framework could be used by institutions as a diagnostic and/or planning tool for AI engagement. Rather than beginning with isolated policies or student-facing compliance measures, universities could use the framework to map strengths, gaps, and tensions across the six domains. This may involve auditing AI policies, identifying staff development needs, reviewing assessment practices, aligning graduate capabilities with workplace expectations, and establishing cross-institutional forums for ethical AI governance. In this sense, the framework becomes a structured

means of supporting institutional dialogue, coordination, and strategic decision-making.

In this sense, AI in higher education is not a student problem. It is a collective institutional challenge requiring coordinated, ethically grounded, and ecosystemic engagement across the entire university environment!

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Generative AI Statement

Chat-GPT was utilised in the preparation of this chapter strictly for language editing and enhancing word choice. All intellectual content, research design, and data analysis was conducted solely by the author.

Figure 1 was initially created using generative AI based on ideas and instruction from the author, and subsequently edited manually for content and style. All content was verified by the author for accuracy.

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Chapter 40 :Instagram Tourism and Changing Travel Geography in Northeast India

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Abstract

Digital media has been expanding fast and it has really, changed contemporary tourism practices in a big way especially now, when social media platforms increasingly shape how people see a place and how tourists move around. Among these platforms, Instagram is coming out as a major visual medium, one that seems to shape travel behaviour, destination branding, and the way tourism is consumed. In this chapter we look at how Instagram-driven tourism is emerging and what it does to the shifting travel geography across Northeast India. The purpose is to figure out, how digital representations of a place affect destination popularity, tourist mobility and the broader transformation of tourism across the northeastern states of India. This research uses a qualitative exploratory approach, and it is built on content analysis of Instagram travel posts, tourism related digital narratives, secondary tourism reports, and also on existing academic work about digital tourism and spatial mobility. The study focuses on how visual culture, influencer-based promotion, and user generated content work together, to turn destinations that were previously less visible, into tourism spaces that now appear clearly in digital media. What we found suggests that Instagram tourism has played a noticeable role in increasing the visibility of places like Meghalaya, Sikkim, Assam, Nagaland, and Arunachal Pradesh, mainly by highlighting landscapes that look attractive, cultural festivals, eco-tourism sites, and adventure tourism activities. The study also points to the fact that social media led tourism has encouraged local entrepreneurship, boosted rural tourism development, and opened regional economic opportunities. But the fast, expansion of tourism into ecologically fragile plus culturally sensitive zones has created also problems around overtourism, environmental decay, waste control, cultural commodification, and infrastructural pressure, kind of all at once. In this chapter it's argued that the growing role of digital tourism really calls for a re-evaluation of tourism governance frameworks across Northeast India. It highlights how important it is to do sustainable tourism planning, involve communities in decision making, keep environmental rules in place, and promote destinations in a more responsible digital manner so the region can develop in a more balanced way and keep long term ecological sustainability. Overall, the study

adds to current discussions in digital geography, tourism mobility, and the socio spatial effects that happen when social media driven travel spreads through peripheral regions.

Keywords- Instagram tourism, Digital media, Tourism geography, Northeast India, Tourist mobility, Destination branding, Sustainable tourism, Digital geography, Cultural commodification.

1. Introduction

Tourism has been changing quite a bit in the twenty first century, largely due to the fast rise of digital technologies and social media communication platforms, you know. With smartphones, easy internet access, mobile photography, and also user generated content, the whole relationship between people and places feels different now. Nowadays travellers don't really depend only on travel agencies, guidebooks, or official tourism advertisements to pick where to go. Rather, digital media platforms are more and more involved in shaping travel hopes, destination preferences and even tourist conduct. And within the broader range of social networking sites, Instagram has really stood out, it became one of the more impactful visual communication arenas that affects tourism geographies around the world.

Instagram tourism is, basically, tourism activities that get pushed or nudged by visual content people share on Instagram and kind of related digital places. On the platform you can post photos, reels, travel stories, and location-based material, and all of it together builds these very appealing destination images. Then with hashtags, geotags, influencer promotion, and those viral visual trends, Instagram keeps sending place-based representations around pretty fast, and they end up shaping how the public imagines different travel destinations. Because of this shift, it also feels like a fresh kind of digital tourism culture has appeared, where destinations are judged not only from what you physically experience but also by their visual charm and how popular they are online.

The growth of Instagram tourism has been, in particular, affecting regions that used to be a bit under- noticed in the usual tourism routes. Northeast India is one such area where digital presence has really shifted the travel geography. This region includes eight states—Assam Meghalaya Arunachal Pradesh Nagaland Manipur Mizoram Tripura and Sikkim— and they are known for very varied ethnic traditions, steep mountain scenery, thick forests, waterfalls, river valleys, plus rather distinct ecological set-ups. Even with huge tourism potential, the area stayed quite removed from mainstream Indian tourism for many decades, mainly due to political turbulence, weak infrastructure, and not enough promotion.

Still, the fast expansion of digital media has started to mess with how tourism works across Northeast India. You can see it in the way images, like photographs of living root bridges in Meghalaya, the floating stretches at Loktak Lake in Manipur, and the monasteries of Sikkim, all get shared again and again through Instagram and other

social media channels. Add the Hornbill Festival from Nagaland, plus the river islands of Assam, and it feels like almost every week there's a new set of posts. Those digital versions, in a kind of indirect way, turn places that were once a bit less known into spots people really want to visit, almost like they became prominent overnight, or at least that's how it looks.

Young travellers and backpackers, along with vloggers influencers, and the more adventure minded crowd, now treat social media like a key instrument for spotting destinations, and then for promoting them across the whole region.
At the same time, the rising buzz around Instagram tourism seems to bring along pretty complex social, cultural, and environmental side effects. The steadily increasing inflow of visitors into ecologically sensitive areas has, in practice, pushed much harder on delicate ecosystems, local facilities, and indigenous cultural arrangements. Digital tourism also tends to nudge culture toward commercialization, and it often rewards a kind of standardized visual framing, you know, the one made primarily for online display. On top of that, many far away destinations see an abrupt tourist expansion without real forethought. So, you end up with waste build up, uneven resource use, traffic snarls, and overall environmental harm, kind of all at once, yes.

This chapter tries to critically analyse the link between Instagram tourism and the shifting travel geography across Northeast India. It looks into how digital depictions shape tourist movement, influence where places become popular, and reshape spatial tourism patterns. The chapter also discusses the opportunities plus the difficulties that social media, as a tourism engine, generates for regional development. It specifically weighs these effects against environmental sustainability, and cultural change dynamics.

2. Conceptual Foundations of Instagram Tourism

a. Digital Geography and Spatial Transformation

Digital geography looks at how digital technologies meet spatial processes. more and more these days, digital communication systems are woven into everyday life, and because of that, people have shifted the way they think about, move through, and actually feel geographical spaces. At the same time, social media platforms are not only used for talking with others. They also work like spatial technologies, shaping how places are pictured and, in turn, how human movement takes place.

Instagram helps build digital geographies because it lets users record and circulate location images through a worldwide flow of attention. With hashtags, geolocation tags, travel reels, and that kind of influencer driven storytelling, places get exposure and a sort of symbolic weight inside digital tourism cultures. When specific locations

keep showing up in repeated visual form, they often become “must go” tourist areas, even if the connection is indirect, since social media users start linking those scenes with aesthetic comfort, adventure and a feeling of realness or even lifestyle longing.
The idea of digital place-making is honestly pretty relevant when you try to make sense of Instagram tourism. Digital place-making is, in a way, the process whereby online depictions end up shaping how people see a place, and even how that place feels like part of their identity. Tourists today often take in a destination through images first, then only later actually go there. So yeah, what counts as a tourism experience starts to be tightly tied to visual expectations that get built, mostly, via digital media

b. Visual culture and tourist imagination

Visual culture matters a lot in modern tourism systems. Tourism has always leaned on visual representations, like postcards, brochures, movies, and regular photography. Still, Instagram ramps up that whole visual side, by setting up ongoing, and also pretty interactive, spaces for image sharing. Because of that, tourist imagination doesn’t just happen in the mind, it sort of gets fed by what is constantly circulating online
The platform motivates tourists to try and record those sort of, visually pleasing moments and then pass them along to online audiences, like it’s a little game. Scenic landscapes, cafés, sunsets, mountain roads, waterfalls, traditional festivals, and even adventure activities end up feeling like, the main “content” types. In practice tourists often choose a place according to how it seems “Instagram able,” like basically how photograph friendly it is for social media sharing.

These visual bent nudges tourist behaviour in several ways. A lot of travellers lean toward aesthetic experiences more than they lean toward historical or cultural learning. In some spots, popularity grows mainly from viral pictures, not from anything ecological or from deeper cultural weight. So, tourism starts to work as a kind of visual consumption and symbolic showing-off more than anything else.

c. User-Generated Content and Tourism Promotion

User-generated content really is one of the defining things in Instagram tourism, you know, not just a small add-on. Unlike traditional tourism advertising that is usually controlled by official institutions, social media tourism works through decentralized content creation, or something like that. In practice, ordinary travellers, influencers, bloggers, photographers, and even local residents all contribute, together, to how a destination gets promoted.

A lot of people see user-generated content as more genuine and trustworthy than formal tourism advertisements. Travellers tend to lean on reviews, photographs, travel reels, and their own lived impressions shared online when they’re still deciding where to go. In this way, tourism representation becomes more “democratic”, so lesser-known

destinations can get noticed, even if they do not really have the budget for big institutional marketing campaigns, and you might feel that effect pretty quickly.
In Northeast India, user generated content has kinda played a major role in lifting up those not-very-visible landscapes, and local experiences. Remote villages, unexplored waterfalls, indigenous food practices, eco-tourism sites , and homestays are getting more attention these days mostly because of digital circulation , not because of official tourism planning or anything like that.

3. Historical Evolution of Tourism in Northeast India

a. Colonial Representations and Peripheral Identity

The historical geography of Northeast India has been melded for a long time by colonial ideas and political marginalization. In the colonial period, the region was frequently pictured as a frontier landscape, with dense forests, tribal societies and an almost stubborn geographical isolation. British colonial administration mostly looked at the area using strategic and economic lenses, linked to tea plantations, oil extraction, and border security, as if that was the whole story.
Tourism development stayed kind of limited, because colonial infrastructure mostly did administrative and commercial things, not really leisure travel. Even though a few hill stations and wildlife areas pulled in visitors, the larger region sort of stayed out of the mainstream tourism stories.

b. Postcolonial Tourism Development

After Indian independence, tourism development across Northeast India moved along slowly, due to infrastructure gaps, political tensions, insurgency movements, and the plain restricted accessibility. On top of that, the region's distance from major metropolitan centres made tourist inflows even more difficult.

Government tourism actions generally leaned on a handful of places like Kaziranga National Park, Shillong, Gangtok and Tawang. At the same time, several ecologically, and culturally rich sites were left out from the official tourism routes. For promotion, efforts often depended on older marketing methods, with minimal international visibility.

c. Emergence of Digital Tourism Networks

During the 2010s the spread of smartphones along with stable internet connectivity, sort of quietly changed tourism across Northeast India. Because social media platforms became more usual, local entrepreneurs' travellers and even small time influencers started to promote places on their own. At the same time YouTube travel channels, Instagram travel pages tourism blogs also grew steadily, and in practice this raised

public awareness about the region's landscapes plus its cultural diversity, in a way that felt almost immediate.

These digital tourism networks lowered informational barriers by letting tourists find travel experiences, suggestions for accommodation, transport guidance, and destination photographs in real time. As a result, tourism expansion could reach far off places that were previously missing from formal tourism maps, or at least they stayed very much out of sight until then.

d. Research Methodology

In this study, a qualitative and exploratory research approach is used to look into how Instagram tourism is shaping, or maybe slowly shifting, the travel geography of Northeast India. Overall, the work mostly leans on qualitative content analysis of digital tourism representations, with extra support from secondary sources such as tourism reports, academic literature, government publications, and regional tourism statistics. It's kind of like piecing things together from what people show online, and then checking it against what's already documented.

The research then takes a closer look at Instagram based tourism content tied to the main destinations across Northeast India, namely Meghalaya, Assam, Sikkim, Nagaland, and Arunachal Pradesh. Publicly available Instagram posts, travel reels, hashtags, geotagged photographs, and tourism content created by influencers were reviewed to figure out how those visual stories affect destination visibility and also tourist movement styles. To do that, tourism hashtags that show up again and again like #MeghalayaTourism#ExploreAssam, #SikkimDiaries#HornbillFestival, and #NortheastIndia were checked, not just for frequency but to spot the leading visual frames and tourism narratives.

The interpretation part highlighted repeating ideas such as landscape portrayal, cultural imagery, eco-tourism promotion, adventure related travel, influencer branding, and digitally mediated travel behaviour. Beyond that, secondary references—policy reports, tourism development documents, journal articles, and earlier studies on digital tourism and social media—were also used to give context to regional tourism change, and to make the discussion feel grounded rather than purely descriptive.

A thematic analytical framework was used to read into, the way digital representation and tourism geography connect. The work mainly looks at how Instagram supports destination branding, drives spatial tourism expansion, shapes tourism consumption practices, and also brings up environmental as well as cultural dilemmas tied to the fast increase of digital tourism. Because the study is exploratory, the aim is not really

statistical generalization, but rather a sort of conceptual grasp of the newer tourism shifts happening in Northeast India.

4. Instagram Tourism and Destination Transformation in Northeast India.

a. Meghalaya and the Rise of Landscape Tourism

Meghalaya, it seems, has turned into one of the more visible examples of Instagram-driven travel in Northeast India. The state's waterfalls, caves, living root bridges rivers, and that cloud covered scenery bring in a lot of visitors, mostly swayed by what they see in digital images.

Places like Dawki, Cherrapunji, Mawlynnong, and the Double Decker Root Bridge, sort of blew up in popularity thanks to viral social media posts. You know, the photos showing crystal clear water, bamboo passage bridges, and wide panoramic landscapes that keep moving around through Instagram travel groups.

And this kind of online attention has made a real difference. Tourist arrivals increased, and local business activities went up as well. Homestays, cafés, transport services and adventure tourism providers have grown in a number of rural areas. But still, the fast arrival of crowds has also caused a mess in terms of waste handling, ecological strain, and that commercialization pressure, which is not exactly small.

b. Assam and Cultural Ecological Tourism

Assam's tourism geography feels kind of remixed, not just by nature, access paths and the usual travel logistics, but also by how social media shows things. Sites like Kaziranga National Park, Majuli Island, tea gardens, river cruises, and cultural festivals seem to attract travellers who are digitally driven, like they scroll first, then choose later, kind of quietly.

Majuli, which is among the world's largest river islands, has gotten especially well known through Instagram photos, plus travel blogging. The traditional satras, mask-making traditions, rural scenes, and Brahmaputra River sunsets they all stack up into this online pull. In the same general way, tea tourism in Upper Assam now leans on attractive depictions of tea gardens and old colonial bungalows, like the whole place is already a postcard waiting to be shared.

Instagram tourism is also nudging people toward cultural festivals, for example the Bihu celebrations, and heritage tourism activities, where the "experience" gets packaged into neat routes. Yet, there are concerns that keep coming back, erosion, environmental vulnerability and the local cultural traditions slipping into something that feels more saleable than lived-in, you know.

c. Sikkim and Mountain Tourism Branding

Sikkim is a good example, kind of, of how digital destination branding can actually work. The state's monasteries, snow- capped peaks, alpine lakes, small cafés, and its eco-tourism rules get a lot of online attention, like every day pretty much.

Instagram, maybe more than anything, has pushed Sikkim's image as a clean, quiet, and earth minded travel place. Travel influencers often show Tsomgo Lake, Nathula Pass, Yumthang Valley, and Gangtok, using visual storytelling that feels very immediate.

Because of this online momentum, Sikkim has benefited from tourism driven economic growth. Still, there are real issues that keep coming back each season, overcrowding, traffic jams, and the waste problem, especially during peak months, and those remain major obstacles for sustainable mountain tourism.

d. Nagaland and Festival-Based Tourism

The Hornbill Festival in Nagaland has turned into one of the most digitally visible cultural tourism events in India, kind of, almost instantly. Instagram reels, photography, and influencer promotion have helped the festival become an internationally recognized tourism magnet.

Traditional dances, indigenous clothing, music performances, local food culture, and tribal background are circulated over social media channels all the time. Yet, even if this heightened visibility supports cultural recognition and brings in tourism income, it also makes people question cultural commodification and whether the "authentic" feel is sometimes more staged than real, you know?

e. Arunachal Pradesh and Adventure Tourism

Arunachal Pradesh has also seen a steady rise in tourism visibility, mainly through adventure travel photography plus influencer-led exploration content. Snow-covered mountains, monasteries, deep valleys, trekking pathways, and border facing landscapes get shown again and again in Instagram travel stories.

Places like Tawang, Ziro Valley, Mechuka and Sela Pass draw visitors who want visually unique experiences, more or less. Social media tourism has built regional awareness and opened up economic chances, but it has at the same time increased stress on fragile mountain ecosystems, which is a problem.

5. Influencer Culture and Tourism Consumption

a. Travel Influencers and Destination Branding

Travel influencers have become more and more important when it comes to tourism movement in Northeast India. They make very curated visual content, almost like it's a mood board, that shows destinations as aspirational lifestyle areas. Their photos, reels,

captions and travel stories help steer what followers start liking, and in the end, it nudges their own travel choices.

Because of that, influencer marketing is now treated as a key tourism promotion approach for hotels, tourism departments, cafés, and travel firms. There are sponsored collabs, plus digital campaigns, and together they help with destination branding and also with being more visible to tourists.

Still, tourism that is pushed mainly by influencers can end up valuing looks, more than what is actually happening locally. Edited images, and these idealized travel narratives, can quietly build expectations that do not match reality about the destination.

b. Performance and Digital Identity

Instagram tourism is tied pretty tightly to the way digital identity gets built. Most travellers use tourism moments as a way to perform social identity, express lifestyle aspirations, and shape personal branding online. Not always consciously, but still.

Adventure activities, café visits, mountain photography, camping experiences, and even traditional clothing start to matter a lot as tools for digital self-presentation. In practice these tourism spaces are more and more like a stage, a backdrop for identity performance that's meant to be seen.

And this shift ends up affecting tourist behaviour as well, because some visitors start to treat content making as the main goal, even when it means less meaningful contact with local surroundings and cultures.

6. Environmental Implications of Instagram Tourism

a. Overtourism and Ecological Pressure

One big consequence of Instagram tourism is the rise of overtourism, especially in environmentally fragile areas. Viral social media posts can pull in sudden tourist waves, even when the place doesn't have enough infrastructure or environmental rules in place.

In Northeast India, fragile mountain ecosystems, rivers, caves, forests, and rural landscapes are getting ecological stress more often. This is largely because tourism growth often happens without proper management. When tourist mobility increases, you see soil erosion, plastic waste buildup, water pollution, habitat disturbance, and even deforestation.

Locations like Dawki and Cherrapunji have felt notable environmental strain, mainly because visitor numbers keep rising. You can see similar issues along trekking routes, in camping areas and also across river tourism spots throughout the region.

b. Waste Management Challenges

The fast expansion of tourism quite often outruns local waste management capacities, and this becomes kind of messy on the ground. Plastic bottles, food packaging

disposable products, and tourism related rubbish keep building up especially in ecologically sensitive landscapes.
At the same time, many rural tourism destinations have no real waste disposal systems, limited sewage treatment facilities, and only weak or absent environmental monitoring mechanisms. So, as tourism keeps growing, it can cause long term ecological consequences, which end up threatening regional sustainability. And it's not just a short issue; it tends to linger.

c. Climate Vulnerability and Sustainable Tourism

Northeast India is highly exposed to climate change effects, like floods landslides, river erosion, and biodiversity loss. If tourism expands without being guided or regulated, the environmental risks may become stronger, because ecosystems get harmed and resource use increases, even more.
That is why sustainable tourism governance becomes necessary, to balance tourism progress with environmental protection. Eco tourism policies, visitor regulation, solid waste management systems and community involvement are the sorts of strategies that really help to reduce ecological burden, and they matter more than people usually think.

7. Cultural transformation and commodification

a. Commercialization of Indigenous Culture

Instagram tourism, it has been shaping the way culture shows up in Northeast India, and in a pretty noticeable manner too. Indigenous traditions, local festivals, handicrafts, food practices, and traditional clothing are now more and more treated like tourism commodities inside digital tourism markets.
There is, on one hand, a kind of upside. When something becomes more visible online, it opens the door for cultural acknowledgment and some economic growth, that part feels real. Local artisans, entertainers, and small entrepreneurs can end up with higher demand from visitors. Still, commercialization can also end up, sort of flattening or bending cultural practices, just for easier visual consumption.
At times, performances are adjusted mostly so they fit what tourists are expected to see, not so much to keep their traditional meanings. So, then the usual questions pop up, about authenticity, about representation, and also about who actually holds cultural ownership.

b. Changing Youth Aspirations

Digital tourism culture… kinda shapes local youth aspirations and their social identities, in ways that are not always super visible at first. A lot of young people now get involved in tourism entrepreneurship, travel content creation, running café businesses, photography work and influencer culture, or at least they try to.

These shifts can bring new economic opportunities and also allow certain routes toward social mobility. Yet, there's another side. If everything leans too much on tourism economies, then economic vulnerability can rise, with season-based jobs, and you might end up seeing unequal access to digital resources too.

8. Economic Opportunities and Regional Development

a. Tourism Entrepreneurship

Instagram tourism has helped expand small scale tourism entrepreneurship across Northeast India. Homestays, eco resorts, cafés, local transport services, handicraft markets, and guided tourism experiences are now more commonly seen in places that are digitally popular.

Social media helps local entrepreneurs market their businesses on their own, without fully depending on formal tourism agencies. Online reviews, travel pages, and influencer collaborations keep feeding customer engagement and regional visibility, so the destination feels more present all the time.

b. Rural Tourism Development

Digital tourism kinda strengthened rural tourism chances, because it promotes villages and far away landscapes that were kind of missing from mainstream tourism economies before. In the last years, rural communities are getting more involved in tourism through homestays, cultural shows, meals from the area, and eco tour projects.

And yes, this also supports livelihood diversification and local income generation, even if it is not always immediate. Still, uneven access to infrastructure, internet connectivity, or investment can lead to uneven development patterns, depending on where you are, and how fast services arrive.

c. Infrastructure Expansion

As tourism demand goes up, it often drives infrastructural expansion too, like roads, lodging facilities, communication networks, and transport services. Better connectivity can help the wider region develop as well, not just the tourism sites themselves.

Even so, infrastructure expansion needs careful planning. Otherwise, there can be environmental damage and uncontrolled urbanization, which nobody really wants.

9. Tourism governance and policy challenges

a. Need for sustainable tourism policies

The fast growth of Instagram tourism points to a real need for governance frameworks that are genuinely sustainable across Northeast India. Tourism policies should deal with ecological conservation, waste management cultural sensitivity, and community participation which is not just a "nice to have" thing.

More and more government agencies are starting to see the value of digital tourism promotion. But still, tourism development plans often end up chasing bigger visitor figures, instead of thinking about long-term sustainability and outcomes that last.
For sustainable tourism planning to work, you need integrated approaches, sort of blending environmental protection, local involvement and responsible digital promotion rather than treating them like separate topics.

b. Community participation and local governance

Local communities matter a lot for sustainable tourism management. When people participate, tourism benefits tend to spread more fairly, and local ecological plus cultural systems face less pressure.
Participatory tourism governance is basically a joint effort between tourism departments, village councils, local entrepreneurs, environmental groups and residents. In some places, community-based tourism models can help limit exploitation and strengthen local control over how tourism develops, too, which can be important for maintaining local identity.

c. Digital Awareness and Responsible Tourism

Tourists, influencers, and travel content creators also have a sort of duty to push sustainable tourism habits, but it often gets lost in the feed, you know. Digital awareness campaigns can nudge people toward responsible waste disposal, cultural respect, environmental sensitivity, and ethical travel practices.
Travel influencers can help in a better way too, they can highlight eco-friendly tourism instead of spreading the whole thing about environmentally harmful trends, even when those trends look “cool” online.

10. Comparative Perspectives: Global Instagram Tourism Trends

What’s happening to tourism via Instagram in Northeast India isn’t exactly a one-off. Similar shifts are seen across many other places, like Bali, Iceland, Santorini, Kyoto, and the Swiss Alps.
In a global sense, Instagram tourism has also fueled overtourism, added environmental stress, and pushed cultural commodification in spots that are visually attractive. Viral images can pull in tourists almost instantly, and those fragile ecosystems often don’t have the infrastructure readiness needed.
Still, a few regions have managed things more carefully. They’ve tried visitor caps, eco-tourism regulations, digital awareness campaigns, and even sustainable tourism certification systems. These cases provide lessons that Northeast India can use for tourism governance, or at least to think about governance differently.
So overall, the comparison shows that digital tourism really needs adaptive governance, systems that can juggle economic growth with ecological protection and cultural sustainability, not just one side.

11. Future of digital tourism in Northeast India

a. Emerging technologies and tourism

In the years ahead, tourism systems will probably get nudged and pulled by digital tools like artificial intelligence, virtual reality, drone photography, and those algorithm-based recommendation engines. Not always in a straight line, but more like a kind of continuous reshaping, day by day.

These tools can change how destinations show up online, also how tourists choose what to see and where to go. Tourism companies, and even regional governments, will lean more on digital branding, plus online engagement styles that keep attention longer than before.

b. Eco-tourism and sustainable branding

The next step for sustainability in Northeast India tourism seems tied to building models that are environmentally responsible. Eco-tourism, community driven tourism, and practices that respect local culture are often viewed as good alternatives to large scale mass tourism.

Digital media, if handled well, can serve conservation awareness, highlight indigenous knowledge systems, support local entrepreneurship, and reinforce sustainable tourism ethics. Its kinda like turning storytelling into something that also protects places.

c. Research directions

Future studies should look more carefully at how tourists see things, how digital mobility unfolds, what influencer economies actually do on the ground, where climate vulnerability shows up, and how local communities feel about tourism changes.

More ethnographic work, digital content analysis, and spatial tourism mapping could help unpack Instagram tourism processes, not only the images, but the wider patterns behind them.

12. Discussion

So, the emergence of Instagram tourism has basically changed the way travel geography looks in Northeast India, but not in some small way—more like it reshapes destination visibility, how people move around as tourists, and how regional tourism economies sort of function. This chapter shows that digital media platforms now play a big role in how tourists imagine and then actually live geographical spaces. Like, via visual representation and user-generated content, social media helps “make” new tourism landscapes, and it also reshapes spatial identities, a kind of rebranding but for place.

At the same time, Instagram tourism brings meaningful chances for regional development. It helps local entrepreneurship, boosts destination visibility, and pushes

tourism economies beyond the obvious urban nodes, even into rural areas. Those remote destinations that earlier did not really have institutional tourism promotion are now able to pull in national and international visitors, mainly through digital circulation, which sounds simple but it's quite powerful.

Still, the study also points out some serious environmental as well as cultural issues tied to unregulated digital tourism growth. Ecologically fragile landscapes get more pressure over time, due to overtourism, waste accumulation, and frankly infrastructural inadequacy, so the place struggles to absorb the demand. And culturally, indigenous practices face the risk of commodification, along with being simplified for market friendliness within tourism circuits.

So, this chapter really stresses that sustainable tourism governance frameworks are necessary. They should balance economic development with ecological conservation AND socio-cultural integrity, not just one side. Tourism planning in Northeast India, it needs to bring in digital literacy, community participation, environmental regulation, and ethical promotion practices, all together, because otherwise the benefits don't last.

12) Conclusion

Instagram tourism has emerged as a sort of transformative force, shaping contemporary travel geography in Northeast India. The rapid circulation of visual content across social media platforms has not only changed destination visibility but also the tourist's imagination and, in a practical sense, the spatial mobility patterns throughout the region. Places once treated as remote, or even difficult to reach, increasingly take up central roles within the digital tourism networks, and that shift feels kind of obvious once you look closely.

Overall, the study shows that Instagram-driven tourism brings both possibilities and complications. On one hand, digital tourism boosts regional visibility, helps local entrepreneurship, promotes rural tourism, and encourages economic diversification. It also allows communities and small enterprises to take part in tourism economies through self-driven digital promotion, which is a little different from older models where access was limited.

On the other hand, the quick spread of tourism into ecologically fragile yet culturally sensitive areas raise real concerns. Think about environmental deterioration, overtourism, the rise in waste generation, and a kind of cultural commodification where traditions become like products for display. A lot of destinations still do not have sufficient infrastructural readiness, nor sustainable management systems, needed for keeping tourism growth aligned with conservation goals.

So, the evolving travel geography of Northeast India also mirrors broader global transformations linked to digital tourism cultures. Tourism now often works through visual consumption, online representation, and influencer-led mobility patterns. In this context, sustainable tourism governance is essential, because otherwise digital tourism development can easily disturb ecological balance or erode cultural authenticity.

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Chapter 41 :Protecting the Environment: A "Second Order" Deep Ecological Perspective

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Abstract

This research paper is an attempt to critically explore a "second order" deep ecological perspective which would be able to protect the environment, and thereby promote a widespread sustainability for all living beings on the Earth. The phrase "second order" implies an alternative solution going beyond technological optimism. The concept of "deep ecology" was propounded by the Norwegian philosopher Arne Naess, and it was developed as a distinct philosophical movement in order to combat the present environmental crisis. It aims to criticize the dominant anthropocentric view and wants to propose an ecocentric view which claims the intrinsic value of all species. Hence, deep ecology breaks the supremacy of traditional environmental thoughts and takes a radical perspective towards nature. As the paper is explorative and evaluative, so I would like to pursue Qualitative Research methodology in general. The theoretical structure includes a conceptual distinction between shallow and deep ecology, a systematic analysis of the deep ecological principles, especially the Platform principles and various normative argumentations which bolster the deep ecological movement. The structure also includes a personal orientation towards nature. Naess calls it "Ecosophy-T". Findings reveal that technocratic solutions alone are inadequate to deal with the deepest environmental ills in our society, since they operate within the same anthropocentric logic. The "second order" ecocentric solution is the only way to protect the Earth with its diversity and richness. The way is actually grounded in the deep ecological "Self-realization". Self-realization is a process by which people come to understand themselves as existing in a thorough interconnectedness with the rest of nature. Hence, considering the entire world as a single family without any domination or exploitation of one by another is the true message of deep ecology. This intuition can create more durable and more sustainable commitments to environmental protection.

Keywords: Second order, Deep ecology, Arne Naess, Ecosophy-T, Self-realization

Introduction

Ecology is one of the most popular environmental concepts of contemporary times. The word "ecology" comes from the two Greek roots, such as "oikos" and "logos". Greek "oikos" means household, home, or place to live and "logos" means study. Hence, the etymological meaning of ecology is "the study of organisms in their natural home".[1] But it has a separate implication in contemporary environmental philosophy. Here "ecology" is an interdisciplinary science which studies the diverse interrelations of living beings, both to its organic and to its inorganic environment. There is no independent being in this world, each and every being is directly or indirectly dependent on other being. Hence, ecology indicates and suggests a simple maxim "all things align together". The Norwegian philosopher Arne Naess takes this ecological maxim and puts it in his environmentalism in order to foster a widespread sustainability for all living beings on the Earth.

Shallow Ecology and Deep Ecology

In his seminal work, "The Shallow and the Deep, Long-Range Ecology Movements: A Summary" (which was published in *Inquiry: An Interdisciplinary Journal of Philosophy* in 1973), Arne Naess basically points out two distinct strands in contemporary ecological movement. *One* is shallow ecology and the *other* is deep ecology. An ecological movement which deals with ecosystems as a whole is called "deep ecology". Whereas an ecological movement which deals with only individual organisms is called "shallow ecology". Though both the movements use the term "ecology" as a pioneering environmental slogan, yet only the second one deserves our special attention in the domain of environmental philosophy. This expression will be clear only when we make an elaborate distinction between these two movements. Let us try to distinguish these two movements.

- Naess characterizes shallow ecology as a short-term reform approach engaged only with "pollution control and resource depletion". The basic conviction of the shallow ecological movement is that the environmental crises can all be technologically resolved. Hence, shallow approach keeps reliance in technological optimism, economic growth, scientific management and the continuation of existing industrial societies. It is thus limited to the traditional anthropocentric moral structure. It also presupposes that people would not accept any radical change in their traditional life-styles. Actually, the supporters of shallow ecology think that reforming human relations towards nature can be done within the existing structure of society. It does not challenge the philosophical presuppositions and validations of industrial social paradigm of reality. As Naess says. "Its concerns are relatively local and selective, only for the health and affluence of developed countries".[2] Whereas

deep ecology proposes a crucial realignment of our philosophy and world-views, cultures, life-styles consistent with the new ecological perspective. It aims at preserving the integrity of nature for its own sake, irrespective of its advantages to any privileged species, such as humans. It is based on this conviction that the Earth "does not belong to humans". Rather we have to change our life-styles, if required. Hence, deep ecology is concerned with deeper and more basic questions upon our interactions with nature, rather than with a narrow view of ecology as a branch of biological science. It thus transcends the limit of any particular science of today, including systems theory and scientific ecology. Hence, the deepness of normative and descriptive premises characterizes the movement.

- Deep ecology attempts to avoid the traditional utilitarian approach to environmental issues, which is concerned with resource management of the environment for human purposes. For the shallow thinkers, the resources of the Earth belong exclusively to the human beings who have the technology to exploit them. The resources should not be depleted at all, whenever they would get rarer, an excessive market value may be required to conserve them. Even their substitutes would be provided through technological progress. Hence, natural elements are valuable only as resources for humans. For the deep thinkers, no natural element should be conceived as mere resource for human. Deep ecology initiates an ecosystemic approach in contemporary environmentalism, rather than a concrete base for consideration merely of isolated life-forms or local situations.
- Shallow ecology may be concerned about over population in developing and underdeveloped countries, but may not be worried about over population in an industrially developed country. Deep ecology proceeds with a particular universal goal. It puts emphasis not only on stabilizing human population, but also of reducing it to a sustainable minimum by humane means which do not require violence and dictatorship. Shallow ecology may condone or even may applaud population increase in a developed country for short-term economic growth, military protection, or for some other purposes. An increase in number of humans may be considered as valuable in itself or as economically lucrative. Deep ecology believes that excessive pressure on natural world stems from the human population explosion. Hence, population reduction should be given the utmost priority in all countries, be it developed, developing, or underdeveloped. It may also demand a redistribution of excess population across low-populated nations in the world.
- Shallow ecology believes that technological assistance is required to prevent air and water pollution. It also believes that pollution can be controlled by making laws and regulations. Polluting industries should be exported to developing countries. Whereas deep ecology believes that exporting pollution

is not only a crime against human beings, it is also a crime against all living beings in general. Here pollution is thus evaluated from a total biospheric point of view. The deep thinkers do not emphasize exclusively on its consequences on human life and health, but rather on planetary life as a whole. Hence, pollution control measures should be taken by considering the ecological requirements of each and every species on the Earth. For example, the shallow reaction to acid rain is tend to avoid action by demanding more research and attempt to explore some species trees which can tolerate excess acidity. The deep approach concentrates on what is going on in the overall ecosystem, and demands a strong campaign against economic conditions and technological innovations which are solely responsible for producing the acid rain. Hence, technology is not a bliss matter at all. As Naess says, "Change in technology implies change in culture".[3] The degree of self-reliance and local autonomy diminishes in proportion with the nature and extension of technology. People gradually lost their spiritual insights, and eventually get swayed by the passivity and unnecessary dependence on technocracy.

- As far as cultural diversity is concerned, there underlies a subtle distinction between deep and shallow ecological movements. Shallow ecological movement tends to repair only some of the worst consequences of our life-styles and social structures, but do not take into consideration the root questions embedded in them. Here cultural diversity is comprehended in terms of articulation, rather than creation. Consumerist approach is the key to shaping the cultural diversity of our present society. Whereas the deep ecological movement seeks creative and aesthetic values which determine the cultural diversity of a society. They are committed to the view that it is our responsibility to save and protect the nature for both present and future generations, be they humans or non-humans. As Naess says, "The aim…is not a slight reform of our present society, but a substantial reorientation of our whole civilization".[4] Hence, deep ecology tries to maintain its deep relation with other natural beings and shallow ecology exactly tries to alienate human beings from nature.

From the above discussion it seems to be clear that deep ecology is actually grounded in two basic ideas. *One* is a scientific insight into the interrelatedness of various systems of life on the Earth, together with the denial of anthropocentrism as a misguided way of seeing things. Hence, "…we need to develop a caring, rather than dominating and aggressive attitude towards the Earth, if the planet, including humans, is to survive".[5] The *second* basic idea of deep ecology is the need for Self-realization. Instead of identifying with our small individual egos or merely with our immediate families, we should learn to identify ourselves with all animals, trees and plants, i.e., ultimately with the whole ecosphere. This may require a pretty radical change in our

consciousness, but it would make our behavior more consistent with what science tells us is necessary for the well-being of all living beings on the Earth. As Naess says, "The norms of deep ecology precipitate directly from psychological awakening".[6] Hence, it is the psychologization of environmental philosophy.

The Principles of Deep Ecology

Arne Naess explores seven basic principles which provide a solid theoretical base for deep ecology. The principles are as follows:

1. **Rejection of the "Man-in-Environment" Image:** According to deep ecology, organisms are knots in the biospherical net or fields of intrinsic relations. An intrinsic relation is characterized here as relation between two things X and Y is such that the relation belongs to the basic constituents of X and Y, and as such, without the relation X and Y are no longer the same things. The total-field approach dissolves not only the "man-in-environment" concept, but it draws a relational, total-field image based on metaphysical interrelatedness of things and beings. All organisms are seen as knots in the biospherical net or as a field of intrinsic relations and mutualities. This total-field image or model dissolves not only the human-in-environment concept, but every compact thing-in-milieu concept.
2. **Biospherical Egalitarianism "in Principle":** Deep ecology believes in biospheric egalitarianism. It states that all living communities (such as biotic and abiotic) have the equal right to live and blossom in its own way. The "in principle" clause is later inserted, as it was supposed that any realistic praxis necessitates some killing, exploitation and suppression. But we have no right to destroy other living beings without any adequate reason.
3. **Diversity and Symbiosis:** Diversity increases the level and potentiality of survival, and thereby enhancing the novelty and richness of life-forms. As Naess says, "To maximize [S]elf-realization we need maximum diversity and maximum symbiosis".[7] It also privileges diversity of human ways of life and culture, of occupations, of economies. Hence, we should subscribe to the cause against economic and cultural domination as well as against annihilation of seals and wheals. Symbiosis means living in harmony with other fellow members. We should always remember that "live and let live" is a more powerful ecological policy than "either you or me". For example, the so-called Darwinian theory of struggle for life and survival of the fittest implies a mutual coexistence. We may interpret it in the sense of ability to coexist and cooperate in complex relationships, rather than the ability to kill, exploit and suppress.
4. **Anti Class Posture:** It is characterized as the enhancement of life-quality of humans depends on suppression and exploitation of other life-forms. But

contemporary ecological investigations demonstrate that this mode of thinking is wrong and incorrect, rather symbiosis enhances the potentialities of survival, the chances of new mode of life, and the richness of all life-forms on the Earth. Whereas the class posture adversely affects their potentialities of Self-realization. The principle of diversity does not permit disparities due merely to certain attitudes or behaviors forcibly restrained. The principles of ecological egalitarianism and of symbiosis support the same anti-class posture. The ecological attitude permits the extension of all three principles to any group disputes, including those of today between developing and developed nations. These principles also allow extreme caution towards any future plans, except those consistent with wide and widening classless diversity.

5. **Fight against Pollution and Resource Depletion:** In the contest against pollution and resource depletion, shallow ecologists envisage a lot of supporters. But their attempts do not comply with the "total stand". This happens when they concentrate on pollution and resource depletion of a country or of a locality in isolation, without taking other related matters seriously. When master plans are implemented to reduce pollution, the planning managers do not take other associated problems into account which might be external and ostensible. For example, they sometimes install some anti-pollution devices, but do not take into account its impacts on the Earth in upcoming future. Naess criticizes such shallow ecological stand, and as a result advocates for sustainable policies of deep ecology.
6. **Complexity, not Complication:** Deep ecology tries to make a distinction between what is really complicated without any integrating principle and what is merely complex. Multiple interacting components may operate together to constitute a unity, or a system. But when we are unable to observe the integrating principle, then it seems to us to be complicated. In ecological matters, due to our gigantic ignorance of the biospheric relationships, we often mistake the complex as complication, and try to get rid of the complex. Applied to humans, the complexity, not complication principle favors division of labor, not fragmentation of labor. It favors integrated actions in which the whole person is active, not merely reactive.
7. **Local Autonomy and Decentralization:** The vulnerability of a form of life is roughly proportional to the weight of influences from outside the local region in which the form has obtained an ecological equilibrium. This lends support to our endeavors to strengthen local autonomy. But these endeavors presuppose an impetus towards decentralization. Pollution problems, including those of thermal pollution and recirculation of materials, also lead us in this direction, since increased local autonomy, if we are able to keep other factors constant, reduces energy consumption. Local autonomy, in socio-political life, is strengthened by a reduction in the number of links in the hierarchical chains of

> decision. Even if a decision follows majority rules at each step, many local interests may be dropped along the line, if it is too long.

Hence, the norms and tendencies of deep ecology are not derived from the ecology of logic or induction. Ecological knowledge and the life-style of the ecological thinker have suggested and inspired the perspectives of the deep ecological movement. The above "seven points" survey are rather vague generalizations, only tenable if made more precise in certain discussions. But all over the world the inspiration from ecology has shown remarkable convergences. As Naess says, "The…tenets of the deep ecology movement are clearly and forcefully normative".[8] They express a value priority system only in part based on results of scientific research. There are political potentials in this movement which should not be overlooked and which have little to do with pollution and resource depletion. As Naess says, "Its directions are revolutionary, but the steps are reformatory".[9]

The Deep Ecological Platform

"The deep ecologists are committed to the view that solutions to the current grave environmental crisis require more than mere reform of our personal and social practices. They believe that a radical transformation in our worldview is necessary".[10] Along with George Sessions and others, Arne Naess has set up a deep ecological platform which is based on the perception that some philosophers alone cannot make a significant change in this world, so we have to organize people from all spheres of society. These include scientists, environmental activists, scholars, artists, and other lay people. Though they may come from distinct backgrounds, yet their common concern is to protect the Earth. Their primary slogan is "think globally, act locally".[11] Hence, the actual strength of the deep ecological movement depends upon the willingness and ability of its supporters and experts who validate environmental decisions in terms of the Platform principles. The Platform principles are based on "eight points" of environmentalism. These eight points are as follows:

> The well-being and flourishing of human and non-human life[12] on the Earth have value in themselves (i.e., intrinsic value). These values are independent of the usefulness of the non-human world for human purposes. When we are talking of the well-being of both, humans as well as non-humans, it includes all species of the planet Earth.
>
> Richness and diversity of life-forms contribute to the realization of these values which also possess values in themselves. They are in no way valuable for the presence of human beings. As Naess says, "Life itself implies an increase of diversity and richness".[13]

Since life is valuable in itself, humans have no right to reduce this richness and diversity except to satisfy vital needs. For example, Darwin's principle of evolution actually suggests this.

The flourishing of human life and cultures is compatible with a substantial decrease of the human population. The flourishing of non-human life requires such a decrease. Ironically, people of rich countries cannot be expected to reduce their excessive interference with the non-human world. They are consciously or unconsciously unable to realize that the whole world is running according to the natural order. Hence, it would be meaningless to make changes to the natural order.

Present human interference with the non-human world is excessive, and the situation is rapidly worsening. Since the citizens of the biotic community (such as humans) may utilize natural resources, so there must be a limit. As M. K. Gandhi says, "The Earth has enough resources for our need, but not for our greed".[14]

Policies must be changed. These policies affect basic economic, technological, and ideological structures. The resulting state of affairs will be deeply different from the present. No one can deny the importance of technological development. But development without sustainability, would no longer be considered as proper development. It would annihilate the existence of natural communities whose presence is very important to maintain the ecological balance.

The ideological change is mainly that of appreciating life quality (dwelling in situations of intrinsic value), rather than adhering to an increasingly higher standard of living. There will be a sound awareness of the difference between big and great. Modern society conceives the quality of life in terms of cultural development, but the concept is quite divergent. It is something which can be characterized in terms of peace and happiness.

Those who subscribe to the foregoing points have an obligation directly or indirectly to try to implement the necessary changes. Deep ecology actually wants to change the human attitude towards nature. Since it is "deep", so it will require an anti-dimensional change which is contrary to shallow ecology.

Here we can see how the above principles could serve to explain and support a wide range of particular positions on practical environmental controversies. For example, points 1 to 3 include the ultimate norm of intrinsic value. Points 4 to 7 make a bridge between the ultimate norm and personal life-styles. Point 8 includes concrete actions relating to the world. To participate gladly and passionately in the deep ecological movement, we have to take our life very seriously. As Naess says, "This life should be a life simple in means, but rich in ends".[15] Hence, deep ecology employs norms, rules,

postulates, value priority announcements and hypotheses concerning the state of affairs in our universe, and along with it, a direct practical orientation to act accordingly.

Ecosophy-T

Arne Naess characterizes his own ecological philosophy as "Ecosophy-T". "Ecosophy" means ecowisdom, i.e., an inner realization of nature as such. The letter "T" implies Tvergastein, a small mountain cabin where Naess lived for a long period keeping in direct touch with the nature. He was inspired by the thoughts of Benedict Spinoza and M. K. Gandhi, and wrote many of his scholarly books and articles at this mountain cabin. Hence, the title represents a personal orientation towards nature.

"Ecosophy" literally means "the wisdom of the household place". It implies the individual wisdom to dwell harmoniously at home in a place on the Earth. It involves being receptive and responsive to the needs of a place and the wisdom which nature has enfolded into it, with its many beings and communities. Communities which live there ecosophically evolve unique practices of forest and land use, are called "vernacular technologies". For example, shelters are built to suit the place to take total advantage of the natural heating and cooling characteristics there. Ecosophy deepens throughout one's life and throughout a culture's life.

Naess suggests that everyone should develop his own philosophy. To develop one's personal ecosophy is to articulate one's ultimate values and philosophy of life as an Earth dweller. It does not mean that anyone has to agree on all the points and with all ecophilosophers. As Naess says, "You are not expected to agree with all of its value and paths of derivation, but to learn the means of developing your own systems or guides, say Ecosophies X, Y, or Z. Saying your own does not imply that the ecosophy is in any way an original creation by yourself. It is enough that it be a kind of total view which you feel at home with, where you philosophically belong".[16] A person's ecosophy may well be based on a traditional culture, or a religion, such as Hinduism. But to practice such personal ecosophy, we must have a comprehensive understanding of ourselves, contexts and relationships with fellow beings, the values which guide us, the commitments we honor and the compassion we show and live.

The development of ecosophy may be demonstrated through the following chart:

Level I	Ultimate Premises	Taoism, Christianity, Ecosophy-T, etc.
Level II	Platform Principles	Peace Movement, Deep Ecology Movement, Social Justice Movement, etc.
Level III	Policies	A, B, C, etc.
Level IV	Practical Actions	W, X, Y, etc.

In the above scheme of things, we can observe that a high level of cross-cultural agreement is possible in Level II, the level of Platform principles. In Level I, we can articulate our own ecosophies of our choice. That means, this Level I is based on one's own belief system, such as Buddhism, Christianity, Hinduism, Islam, or may be from an indigenous culture and tradition, or even from one's own very personal ecointuitions, as in case of Naess's Ecosophy-T. In Level II, there may also be peace movement, social justice movement, etc. simultaneously with the deep ecological movement. From this Level II we can drive certain policies, such as A, B, C, etc. which constitute Level III. This Level III leads us to practical actions at Level IV. At Level III and Level IV, there is a considerable diversity. In the process of derivation, we move towards the Platform and develop policies and practical actions. But the ecological policies may vary with changing natural conditions.

Hence, Naess's Ecosophy-T may be summarized into some basic points. These points are as follows:

1. The narrow self (ego) is totally contrary to the comprehensive Self (which can be written with capital "S").
2. Self-realization is actually the realization of the comprehensive Self.
3. The process of recognition is the basic tool of widening the self and a natural consequence of increased maturity.
4. Strong recognition with the whole of nature in its diversity, and interdependence of parts is the source of active participation in the deep ecological movement.
5. Recognition is a source of conviction in intrinsic values.

The Principle of Self-realization

Arne Naess later on puts Ecosophy-T into one ultimate norm and that is "Self-realization!". He advocates a psychological rather than a moralistic attitude to environmentalism. Self-realization is a process by which "people come to understand themselves as existing in a thorough interconnectedness with the rest of nature".[17] This notion will be clear only when we make a general distinction between needs, interests and wants. "Needs" could be understood as those things which are necessary for our very survival, such as food, clothing, shelter, pure air and water. "Interests" are those components which contribute to our well-being, such as interests to have friendship, education and good physic. "Wants" are the immediate desires and goals toward which a person is inclined. We may want for a week holiday, want for a glass of lemon water and want for a candle light dinner. If we consider a little, we will see that these categories may overlap. Food with adequate calories which I need, have an interest in getting, and actually I want this. But there may also be tensions among them.

Though it is my interests to improve my academic insight and so study at home, yet I want to go out for a trip with some of my companions. Here wants are typically seen as individualistic, choice to one's own culture and society. Undoubtedly these are external and temporary, and various moral codes encourage us to separate these transitory wants from our basic interests as rational and ecologically responsible beings. Hence, a good life should be characterized in terms of the pursuit of those genuine virtuous interests. When we move along the line, we gradually come to realize our Self, or in other words "Self-realization!". The ancient Greek tradition calls it "Know thyself!". It is a sanction to get beyond the level of these three categories with a view to realizing our true Self. It is a process by which a person come to know that there is no ontological division between humans and non-humans, i.e., "all is ultimately one". As Warwick Fox says, "The world is simply not divided up into independent beings, nor is there any divergence in reality between the human and the non-human realms. Rather, all realities are constituted by their interactive relations".[18] Hence, considering the entire world as a single family without any domination or exploitation of one by another is the true message of deep ecological Self-realization.

This is exactly the same concept which we have already observed in the Indian tradition. The Indian philosophers concentrate on a close connection between "nature" and "humanity". It is said that an ideal human being sees himself in nature and nature in him. Arne Naess, the Western proponent of deep ecology, shows his kinship with the Advaita Vedāntīan spiritualism. He cites a verse of the *Bhagavadgītā* in this context. The verse is as follows:

Sarvabhūtasthamātmānaṁ sarvabhūtāni cātmani |

Īkṣate yogayuktātmā sarvatra samadarśanaḥ || (6/29)

It simply means, "He, whose Self is harmonized by yoga sees the Self abiding in all beings and all beings in Self, everywhere he sees the same".[19] Hence, an ecocentric view with a spiritual insight (strengthened by the deep ecological "Self-realization" or the Advaita Vedāntīan theory of "*samadarśana*") is one of the best options for protecting the environment.

Concluding Remarks

Without science and technology, the development of modern society cannot be conceived at all. Many intellectuals thinks that in the age of science and technology, talking about metaphysics is irrelevant. Here is a crucial point which needs to be mentioned. Though science is all right and technological development is welcome to resolve the present environmental crises, yet at the same time it is also true to say that excessive technological practice on the Earth actually degrades or deteriorates the

Biosphere at large. Hence, it is really alarming not only for the present generation, but more alarming for the future generation as well. Excessive technological application on the Earth not only damages the Ecosphere, but it equally barrens everything in the Globe, and thereby turns into the natural environment into an "artificial environment". For example, the aesthetic appreciation of "a natural rose" can never be substituted by "a plastic rose". Hence, the "first order" way cannot be able to protect the environment sustainably.

So deep ecology wants to explore a "second order" way to cope up with this critical situation arising out of science and technology. It breaks the primacy and legitimacy of traditional environmental thoughts, and thereby takes a radical perspective which is very much directed towards personal and cultural transformations. As we have already seen, deep ecology is actually grounded in two basic ideas, such as (i) the critique of anthropocentrism and (ii) the need for Self-realization. Deep ecology believes that where there is anthropocentrism, there are classes, ups and downs, dualism, materialism, and consumerism. Hence, it tries to abolish individualism, relativism, solipsism, and thereby proclaims "universal holism". This is the ideology where everyone feels for others, cares for others, respects for others, and eventually reaches to the deep sense of "Self-realization". Deep ecology also believes that as long as natural communities are concerned, humans are in no way superior to others. One's superiority should not be measured in terms of the distinctive property or properties it possesses, rather on the association of a distinctive whole, i.e., on the basis of a relational whole. This realization will gradually lead us to understand that "the good of one is intimately related to the prosperity and well-being of others". This intuition can create more durable and more sustainable commitments to environmental protection with its diversity and richness.

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Chapter 42: From Plastic to Practice: Why People Fail to Adopt Sustainable Habits

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Abstract

This study takes a long look at the stubborn gap between people saying they care about the environment, and then still going ahead with unsustainable habits in day-to-day life, especially where plastic dependency and everyday consumption behaviour are involved. Even though public concern about environmental degradation is rising, and there are more talk and global push for sustainable living, harmful routines somehow still dominate in both urban and semi-urban spaces. The main aim of this chapter, partially in plain terms, is to unpack the socio-psychological, cultural, economic, and infrastructural reasons that keep awareness from turning into real behavioural change toward sustainability. The research uses a qualitative and analytical route, pulling from behavioural geography, environmental psychology, and sustainability studies, to examine both the structural setup and the lived behavioural side of unsustainable lifestyles. In the discussion, it becomes clear how convenience-first routines, consumer culture, reflexive reliance on disposable items, digital consumption systems weak institutional support, and the limited availability of sustainable options, all mix together and shape the way environmental choices get made. So, it is not only that people "know better," and then act, it is more complex than that. This chapter also argues that environmental behaviour is not controlled only by awareness or by personal moral responsibility, rather it is deeply steered by social norms, economic structures, cultural expectations, and the small daily routines that people repeat without thinking. The findings suggest that even individuals who are genuinely environmentally conscious may keep doing unsustainable practices anyway, because those habits become socially normal, economically easy, and basically built into modern consumer systems. The analysis kind of shows that sustainability initiatives often stumble, if the supportive infrastructure, the actual policy follow-through, and the institutional reinforcement keep lagging behind in one way or another. It also ends up suggesting that to reach long-term sustainability, need a multi layered approach where behavioural transformation is paired with stronger environmental governance, better access to sustainable alternatives, and, at the same time, wider cultural change. Simply running awareness campaigns on their own does not prove

sufficient, unless environmental responsibility gets socially reinforced and can be lived with, in a practical way within
everyday life. And by looking at how perception links up with behaviour, plus the surrounding structural conditions, the chapter adds something to current conversations about sustainable development and environmental behavioural change.

Keywords: Sustainable habits, Plastic consumption, Awareness action gap, Environmental behaviour, Socio-Psychological barriers, Sustainable development.

1. INTRODUCTION

Environmental sustainability has increasingly become one of the defining worries of the contemporary world. Rapid industrialization, urban growth, consumer capitalism, and changing lifestyle routines have reshaped the way human communities relate to the natural environment, quite considerably. Among the many ecological challenges facing humanity today, plastic pollution has surfaced as one of the most noticeable and stubborn environmental crises. Plastic materials have also been woven considerably tightly into modern life because they are affordable, long-lasting, and convenient. From wrapped food and shopping systems to transport and daily home use, plastic products dominate everyday social and economic activities, more than people often realize.

Yet this rising reliance on plastic materials has brought severe environmental consequences, at global as well as local levels. Rivers, oceans, forests, farmlands, and even urban habitats are now increasingly affected by plastic buildup and littering. Scientific conversations about marine pollution, biodiversity decline, microplastic contamination, and climate fragility have also grown stronger, and they keep raising global attention about the ecological impacts linked to unsustainable consumption habits. Governments, environmental associations, academic centers, and media outlets continuously push for sustainable lifestyles via awareness campaigns, encouraging recycling, reusable goods, and greener substitutes.

Even with this growing sense of awareness, actual behavioural shift stays relatively narrow. A lot of people say they're worried about environmental harm, yet they keep doing practices that are still fairly damaging. Disposable plastics keep showing up everywhere, in markets and daily routines too, mainly because they're inexpensive, easy to reach, and kind of socially acceptable. That odd clash, between being aware, and then still acting the opposite way, has turned into one of the main challenges in sustainability talk.

The awareness–action gap kind of points at how complicated human behaviour is in today's consumer settings. What people do environmentally isn't shaped only by knowledge, but also by social habits, economic pressures, convenience-focused lifestyles, infrastructure limits, and cultural expectations. Someone can clearly

understand that plastic dependency causes harm, but still treat alternatives as awkward, pricier, or simply not available. So, sustainability stops being only a moral conversation or an info problem; it turns into something tied directly to social systems, daily routines, and real structural circumstances.

The whole problem looks especially big in developing societies where fast urbanization continues happening and a widening consumer mindset has, kind of gradually, upped waste creation and the overall material use. In India, environmental awareness has grown substantially late, not only through education programmes, also via government actions and digital activism. Still, plastic dependency stays highly embedded in everyday social habits. Single-use plastics are still the mainstream in markets, food supply chains, and household routines because they slot in so smoothly with a hurried, present-focused way of living.

This chapter looks at and somewhat questions why many people do not switch into sustainable habits even while awareness continue rising. Using behavioural geography, environmental psychology, and work in sustainability studies, the analysis traces how socio-psychological hurdles, consumer culture, social norms, and infrastructural imbalances, together, steer environmental behaviour. The chapter also maintains that sustainability cannot be reached by awareness campaigns alone. Instead, meaningful change takes time and needs supportive institutional systems, interventions that are practice-led, and bigger structural shifts that can weave sustainability into daily life.

1.1 Behavioural Geography and Sustainability

Behavioural geography gives an essential way of looking at how human behaviour and environmental choices partially link up. Classic geographical approaches usually focused on spatial patterns, economic systems, and physical landscapes, fairly cleanly. But behavioural geography later turned its gaze toward how individuals perceive factors, how they decide, what they feel emotionally, and also how they interact behaviourally with the environments around them.

The overall idea is basically that people do not always act on a purely rational environmental logic. Human actions often come from habits, convenience, emotions, social pressure or plain everyday experiences. So, environmental behaviour ends up tied in closely with psychological and social realities, rather than only with scientific awareness.

In sustainability studies, this branch helps clarify why ecological concern does not automatically become sustainable behaviour. People can recognise environmental damage yet still keep doing unsustainable practices because those actions are socially accepted and also simply structurally convenient. Take plastic dependency for instance, it is not continued only because someone lacks information, it’s more about

behavioural systems that are deeply embedded in daily life, and they kind of steer everything from there.
Behavioural geography continues showing that the environmental context, it matters a considerably for how people act, kind of shaping those choices in day-to-day life. Sustainable behaviour usually stands a better chance of happening when there are supportive infrastructures around, like recycling systems, public environmental services, and eco-friendly options that are easy to reach or simply choose. If those structures are not there, environmentally responsible behaviour is often hard to keep up over time, even if someone intends to do so at first. So, sustainability can't be seen only as a personal ethical responsibility, like, only inside one person. It also needs to be understood through wider social, spatial, and institutional conditions that indirectly guide everyday decision-making.

1.2 Environmental Perception and Everyday Behaviour

Environmental perception has a major role in shaping, sustainable practice and the in a way people keep habits. People often interpret ecological troubles differently, depending on their educational background, cultural values, social experiences and also geographical surroundings. Because of that, environmental awareness is not always the same, can highly see it shift across societies and local communities.
In many situations, ecological crises, like climate change and plastic pollution are treated as if they are far away or kind of abstract, not like something immediate that sits inside everyday life. A person might be able to recognize environmental degradation, intellectually yes, but still not significantly link their own consumption habits with wider ecological consequences. This psychological distance, makes transformation feel less urgent, and motivation can gradually fade.
Modern lifestyles also seem to push this gap even further between "what we know" and "what we do." In many contemporary urban contexts, society values speed, convenience, and efficiency, so people end up buying and using conditions quickly rather than pausing for reflective environmental decisions. Disposable products become normalised because they save time, and they align with routines that are already moving fast.
The growing dominance of digital consumer culture kind of has shifted consumption behaviour as well. Materials like online shopping systems, food delivery platforms, and very heavily packaged commodities tend to push a disposable lifestyle, while at the same time keeping people far from, or at least less aware of, the real environmental outcomes that come from waste generation. So, sustainability ends up competing with convenience first of all, because those comfort-based systems are embedded within everyday economic life.

Environmental behaviour is also shaped by emotional and symbolic processes. Many people link consumption with comfort, social standing and personal identity. Because of that, sustainable alternatives may seem, somewhat restrictive or inconvenient, especially inside consumer driven societies where material consumption is tightly connected with lifestyle ambitions.

1.3 Habit Formation and Unsustainable Lifestyles

Habit formation is basically one of the strongest hurdles to sustainable behavioural transformation. People, in general, rely on routine actions, repeated day after day, within ordinary life. After a while, those repeated practices kind of turn into automatic habits that need almost no conscious thinking or careful reflection.

The use of plastic bags, disposable bottles, packaged commodities, and single-use products often ends up looking normal, mostly because repetition remains happening. In that way, these habits slowly weave themselves into shopping patterns, transportation routines, workplace culture, and home practices. Then once they're there, those same routines can be strangely hard to adjust, even if a person clearly understands that environmental harm is involved.

Modern consumer economies keep feeding these unsustainable habits by means of advertising, market incentives, and convenience-driven service models. Disposable culture is presented as fast, hygienic, and somehow more advanced. Fast food packaging, online delivery systems, and mass retail consumption all help make waste-producing lifestyles feel like symbols of comfort and easy access.

Social environments keep pushing habitual consumption along, like it's relatively normal. People frequently tweak what they do based on the social norms that are already around them. And if, in some communities, unsustainable practices stay "normalized", then sustainable options can start to feel inconvenient or kind of unimportant socially. So then behavioural change isn't easy, not strongly, unless there's also broader change in culture and the institutions behind it.

Habitual behaviour also weakens conscious environmental thinking. Individuals often do the unsustainable practices automatically, without even pausing to weigh the ecological consequences. So sustainable behaviour ends up needing more than awareness. It also needs an active disruption of established routines and the building of new behavioural patterns, step by step, bit by bit.

2. Social Norms, Consumer Culture, and Sustainability

Social norms strongly steer environmental behaviour in today's societies. People don't simply follow personal values, but also collective expectations, social acceptance and partially cultural rhythm that is hard to notice. Often individuals recalibrate their

choices according to the prevailing behavioural models within families, schools, workplaces and local communities.

When environmentally harmful practices are kept socially normalized, sustainable behaviour can start to feel, somehow, unnecessary or only a little too inconvenient. Plastic use, excessive packaging and a throwaway style of consumption keep moving forward because these habits are built into daily social routines. In many places, environmentally responsible practices are still only lightly institutionalized, and so they gain limited social reinforcement.

At the same time, consumer culture has magnified unsustainable lifestyles across many parts of the world. Modern economic systems tend to value quick purchasing, ease, low cost and disposability, almost by default. Consumption is now more than an economic act, it also becomes a social and cultural signal linked with identity, personal aspiration and modernity.

Packaged commodities, quick moving retail systems, and digital consumption platforms to a certain extent represent efficiency and convenience within urban communities. Yet, sustainable alternatives very often need extra effort, some pre planning, or a bit more financial investment, so they feel less appealing in these convenience first lifestyles, where people only… want conditions now.

Also, the expansion of digital economies has pushed disposable consumption even harder. E-commerce systems, food delivery applications, and online consumer markets depend greatly on plastic packing and swift distribution corridors. People are now leaning toward accessibility and efficiency, while the ecological fallout stays more in the background, almost as if it's secondary concern.

So, sustainability issues can't simply be handled through personal awareness campaigns alone. Real environmental change needs wider shifts across consumer culture, social norms, and institutional systems that gradually shape daily behaviour, even when nobody strongly notices it.

2.1 Social influence and environmental behaviour

Human behaviour is, kind of, deeply influenced by what happens inside collective social environments. Families, peer groups, educational institutions, and even media systems they significantly shape how people form attitudes about sustainability and consumption. It's not only one thing, it's all together significantly.

People are more likely to adopt environmentally responsible behaviour when sustainability is socially encouraged, and also culturally visible. Recycling practices, reusable products, and ecofriendly consumption tend to get more acceptance when communities collectively stand behind environmental responsibility, like it's normal there.

Yet if unsustainable behaviour stays normalized, individuals often feel almost no motivation to change. When disposable products are socially accepted and convenience-oriented lifestyles stay popular, the urgency of sustainability practices feels less important.

Media culture also has its own influence on environmental perception. Social media platforms increasingly promote sustainable lifestyles via environmental campaigns and digital activism. But at the same time digital consumer culture also boosts excessive consumption, and convenience-oriented behaviour. That contradiction shows how complicated sustainability is in contemporary societies, honestly.

2.2 Consumer Culture and Disposable Living

Consumer capitalism kind of normalized disposable living as part of modern social identity, like “this is simply how it is”. With the expansion of global retail markets, mass production systems, and fast-moving consumption economies, people end up depending more on single-use materials and very wrapped, highly packaged commodities.

This throwaway culture is tightly tied to ideas of convenience, “efficiency”, and easy accessibility. Plastic packaging continues dominating, mostly because it is cheap, light-weight and also financially profitable. So, consumers slowly get used to convenience-first consumption routines that chase immediate usefulness instead of thinking about long-term environmental responsibility.

And then, advertising systems highly push it further, because they connect buying with happiness, comfort, and some kind of social status goal. Individuals are encouraged to purchase again and again, while the environmental costs stay mostly hidden inside the market machinery, like out of sight, out of mind.

Sustainable alternatives often can’t compete that smoothly in these settings because they may look pricier, or feel harder to reach, or simply be socially unfamiliar. So, sustainability is not only about changing personal habits here and there, it needs a wider shift in consumption culture overall, rather than small isolated behavioural tweaks.

2.3 Digital Consumption and Everyday Convenience

Digital economies have, in a very noticeable way, reshaped consumption patterns over the twenty-first century. Systems for online shopping, food delivery services, and app-based consumer platforms have made daily life easier and faster while also ramping up packaging waste, and—somehow—keeping plastic dependency stubbornly in place.

Nowadays people often choose based on efficiency and access, especially in fast moving urban routines. Delivery services lean substantially on disposable containers, plastic utensils, and multilayer packaging, which piles up rather quickly. Likewise, e-commerce platforms produce huge amounts of packaging waste, mainly through shipping routes and distribution mechanisms, that are already built into the process.

Even when individuals are aware of ecological concerns, the convenience of digital consumer culture can still win in everyday choices. People might acknowledge environmental harm yet keep doing the same unsustainable conditions, because convenience driven systems are now deeply embedded within ordinary life.

That kind of contradiction suggests sustainability cannot be handled only through personal ethical effort. What's also required is structural change inside production, packaging industries, and digital economies, so long-term environmental improvement can actually happen, not simply be wished for.

3. Conclusion

The whole situation seems to be getting worse, more and more environmental crisis and also a larger reliance on plastic based consumption have, in a way, pushed global worries about sustainable behavioural changes. Even if environmental awareness has grown considerably, thanks to education, policy pushes, what the media says, and activism, the shift from "I know" to "I actually do it" is still quite weak in many places. In this chapter, the socio psychological, cultural, economic, and infrastructural causes behind why unsustainable habits keep sticking around in contemporary life were examined critically.

The discussion basically shows that environmental behaviour is not only about information or moral care, but also about convenience minded lifestyles, consumption patterns that are already deeply embedded, social expectations, the digital consumer culture, and structural inequalities. Behavioural geography helps considerably as a framework, because it makes it easier to see how environmental choices get shaped by daily routines, emotional impressions, institutional setups, and even spatial circumstances. The study also points out that unsustainable practices persist because they are often cheap enough, socially treated as normal, and built into the modern systems of production and consumption, like it's simply how conditions work.

The chapter also underlines where awareness-based sustainability campaigns can, kind of, fall apart when they don't get the real backing of accessible infrastructure, affordable options, and responsive institutional action. In other words, sustainable behaviour cannot significantly be done only by putting everything on individual responsibility; it instead asks for shared involvement, with governments, educational institutions, businesses, communities and consumers working together, kind of in tandem. What matters most is more solid policy enforcement, better waste

management, realistic sustainable market alternatives, and targeted behavioural interventions that nudge and steer people over time.

Overall, the study suggests that sustainability has to move beyond being a neat concept people know about and it needs to sink into day-to-day routines. Real environmental change shows up only when sustainable choices become socially acceptable, easy enough to afford, and clearly supported by institutions. So, the making of sustainable futures depends on the combined effect of behavioural shifts, structural reform, and collective responsibility toward the environment.

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Chapter 43: Leveraging Global Partnerships to Enhance the Availability of Drinking Water in the Bamenda III Municipality of the North West Region, Cameroon

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Abstract

Partnerships approaches to development challenges in developing countries have received widespread support from across the political spectrum, including policy makers, officials and local communities. The task of lifting millions of people out of abject poverty has been overwhelming for many governments of developing countries, with a considerable portion of their population still living below the poverty line. In Cameroon, survey data in 2021-2022 reveals that 23 percent of the population lives below the international poverty line of $2.15 per person per day (World Bank, 2024). Despite efforts by the government to improve on the living conditions of the population, the inadequacy of basic infrastructure and amenities like portable water continue to pose a considerable challenge in most areas of the country. This work focuses on the importance of global partnership on local development using Bamenda III council water project as a case study, looking at the impact the project has created in the Bamenda III municipality. The study employed a mixed method research approach, combining a survey of the local population and interviews administered to key stakeholders. A total of two hundred and two (202) questionnaires were administered to beneficiaries identified using a proportional stratified random technic. Five (05) interviews were also conducted with key stakeholders including officials in charge of water management at the Bamenda III council. Findings indicate that 35% of the respondents attributed the prevalence of some water borne diseases to the doubtful quality of water consumed, while 55.6% of sample population did not have access to the council water. While the Bamenda III water project has made considerable strides towards ensuring access to clean water and sanitation for residents, there is need to increase its availability to the population, reduce costs and bureaucratic bottlenecks around water connection.

Key words: poverty, partnership, decentralization, development, water

1. INTRODUCTION

Partnerships approches have received widespread support from across the political spectrum, including policy makers, officials and local communities. They are likely to remain high on the policy agenda at all levels (Kelly, 2003). At the supra-national level, the European Union (EU) and the United Nations (UN) promote partnerships as they operate with and through Member States and more local agencies to achieve its policy aims, taking account of national rules and practices (CEC, 1996). Partnerships cut across cultures and legal systems that have existed throughout most of recorded history. Global partnership for development is a multi-sector network between countries across the globe. The purpose of global partnerships, is not to create one-size-fits-all solutions or recommendations but rather to acknowledge diversity of partners, the tensions between the different partners particularly those trapped in the global north, global south divide and the diversity of their goals, expectations and interests.

The role of global partnerships in encouraging development and poverty reduction around the globe are emphasised in the Millennium Development Goals (MDGs). MDG eight emphasises the need to build global partnership to foster development initiatives. The responsibilities of developing countries with those of developed countries, founded on a global partnership was also endorsed at the International Conference on Financing for Development in Monterrey, Mexico in March 2002, and again at the Johannesburg World Summit on Sustainable Development in August 2002". Partnership between developing countries and rich countries in a variety of forms will greatly facilitate the achievement of the Sustainable Development Goals and other development initiatives around the world.

Increasing access to clean water to the people of developing countries is one of the ways to meet up with the Sustainable Development Goals. It is estimated that half of the people who lack access to safe drinking water and sanitation should have access by 2030 (UNDP, 2005). According to Georgeson & Maslin (2018), it is anticipated that Sub-Saharan African countries might not meet the target till by 2040. To partly achieve the goal of accessibility of water, it is important to involve stakeholders especially beneficiaries' active participation in planning, implementing and managing water and sanitation projects (Johnson et al., 2004). Rogers and Hall (2003) also maintain that there is the need for effective participation of users in planning, implementation and management of water projects. Providing safe drinking water in rural areas is a major challenge because it is not easy to establish institutional arrangements that will ensure that drinking water facilities are provided, maintained, and managed in an efficient,

equitable, and sustainable way. In rural settings, the capital investment in water system is usually provided by the government and/or non-governmental organizations (NGOs).

Dionisio et al., (2010) indicated that easy access to clean water in rural communities enabled women directly and men indirectly to save a considerable amount of time which they used to fetch water in activities that supported their subjective well-being indicators. In the planning and designing of water projects it is important to ensure the needs and interest of both men and women.

Bamenda III municipality suffers from water shortage. This is the lack of fresh water resource to meet water demand. This shortage exposes the community to a number of challenges including inadequate sanitation, exposure to many diseases such as cholera, typhoid fever and other water borne illnesses which increases mortality rate especially in children. Also, another issue was population increase in the Bamenda III municipality. The ongoing Anglophone crisis has caused many people to leave their villages to safe areas in the North West and south West. Bamenda III happens to be one of the safe areas since the crisis started and many people have come to seek refuge. Due to this population increase, there is also high demand of water to carry different day to day activities and the water available is not sufficient to meet up to the demand of the increasing population. In the last 50 years, the human population has more than doubled and this growth is also accompanied by increased economic activities and a consequent increase in the demand for water.

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In an effort to resolve the water scarcity problem, Bamenda III Council signed a partnership agreement with Trier City in Germany. Trier city donated a water purification plant to Bamenda III. This was effectively done in 2015 and the population of Bamenda III is already enjoying good water though not every part of the municipality even though the work is still in progress and every year, effort is made to extend supply to other parts so more people can benefit from the water." (Bamenda III CDP, 2015).In 2021 the water team from Germany concluded the core of the project, with minor work expected to continue in the coming years especially on extension of the water to areas not covered.

2. CONCEPTUAL FRAMEWORK

2.1- Commitments on Global partnership for local development

Global partnership for effective development provides a multi sectorial platform to advance the effectiveness of development efforts by all actors to deliver results that are long lasting and contribute to the achievement of the sustainable development**.** Since the MDG Gap Task Force Report 2008, there have been a number of reconfirmations by the developed countries of their commitments to increase official development assistance (ODA). The Doha Declaration, adopted by Member States of the United

Nations at the Follow-up to the International Conference on Financing for Development to Review the Implementation of the Monterrey Consensus in December 2008, stated that "the fulfilment of all ODA commitments is crucial, including the commitments that was by many developed countries to achieve the target of 0.7 per cent of Gross National Income (GNI) for ODA to developing countries in 2015 and to reach the level of at least 0.5 per cent of GNI for ODA by 2010". It also "welcomed the declaration by the leaders of the Group of Eight in Hokkaido, Japan, Germany that they are firmly committed to working to fulfil their commitments made at Gleneagles, Scotland, including increasing, compared to 2004, with other donors, ODA to Africa by $25 billion a year by 2010". At their meeting on 2 April 2009, the leaders of the Group of Twenty (G-20) reaffirmed their commitment to achieving their ODA pledges, including commitments on Aid for Trade, debt relief and the Gleneagles commitments, especially those for sub-Saharan Africa. They also agreed to provide an additional $50 billion to support social protection, boost trade and safeguard development in low-income countries as well as $6 billion of additional concessional and flexible finance to the poorest countries over the next two to three years.

2.2- Global Water Partnership

According to Fourth World Water Forum (2006), The Global Water Partnership (GWP) was conceived as an international network to support developing and transition countries in the sustainable management of their water resources by advocating and facilitating the good practices being promoted by several international agreements on water. International concern for the poor state of water management was first raised at the UN Conference on Water at Mar del Plata in 1977. Subsequently, the International Drinking Water Supply and Sanitation Decade (1981–1990) put a spotlight on improving access of the poorest to potable water. While the provision of safe drinking water and sanitation remained at the top of the agenda as evidenced by the World Summit on Children (New York 1990) and the Global Consultation on Safe Water for the 1990s (New Delhi 1990) there was increasing recognition that safe water and the proper means of waste disposal should be embedded in a more comprehensive strategy of integrated water resources management.

Accordingly, an International Conference on Water and the Environment in Dublin (January 1992) established a set of principles for water development and management and the UN Conference on Environment and Development in Rio de Janeiro (1992) fully endorsed the move toward more integrated and comprehensive water resources management. The Rio Declaration also proposed "establishing a new and equitable partnership through the creation of new levels of cooperation among States, key sectors of society and people." Together, these conferences established the rationale for a global partnership to provide guidance to water management and

development. The Dublin Principles for Water Development and Management: Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment, Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels, Women play a central part in the provision, management and safeguarding of water, Water has an economic value in all its competing uses and should be recognized as an economic good."

2.3- Water Sustainability

According to Laflamme et al., (2009), in rural Africa, 'water poverty' can destroy lives and livelihoods. Children under five are highly vulnerable to waterborne diseases. While a broken water pipe in London may be a temporary inconvenience, a failed well in sub-Saharan Africa is potentially catastrophic. And this is a catastrophe that is spreading across the continent, where an estimated 50,000 water supply points have effectively died. The root cause is the water community's failure to plan for maintenance of the infrastructure in a systematic way, creating a massive drag on meeting the Millennium Development Goal target on water and sanitation. Yet blueprints for building and financing wells of all types are available, and long-term provision of safe water is not rocket science. The writer depicts that to be sustainable, direct investment in water supply infrastructure also needs to address the issue of who will maintain it, and where the money and skills to do so will come from briefing Water hole. Africa's failed wells throughout rural Africa, tens of thousands of water points are drilled and dug every year many of them boreholes, narrow well shafts equipped with motorized or hand pumps. In the context of Millennium Development Goal (MDG) 7 on environmental sustainability, this might seem a positive development; one of its key targets is to halve the proportion of people without sustainable access to safe water and basic sanitation by 2015. But much of Africa's water supply infrastructure is failing for a simple and avoidable reason, the lack of maintenance.

2.4- Water and Health

The lack of access to safe water, basic sanitation and good hygiene practices is the third most significant risk factor for poor health in developing countries with high mortality rates (WHO, 2002). Diarrhoea disease, for example, is widely recognised as the principal result of inadequate water, sanitation and hygiene. 1.8 million People die every year from diarrhoeal disease; 90% of whom are children under the age of 5 (Orsi, 2004). 133 million people suffer from high intensity intestinal helminthic infections (Ascariasis, Trichuriasis, Hookworm disease) which often leads to severe consequences such as cognitive impairment, massive dysentery, or anaemia. Sub-Sahara Africa needs better management of water resources and improving access to water and sanitation. Poor people in Africa spend at least a third of their incomes on

the treatment of water-related diseases like malaria and diarrhoeal. The cost of the productive time lost due to these diseases, as well as widespread human suffering must also be added to this (Yang et al 2007). Evidence shows that improved water supply and sanitation facilities and better hygiene behaviour will radically reduce population illness. Improved water supply can reduce diarrhoea morbidity by up to 25% if severe outcomes are included (Yang et al, 2007). Improved sanitation reduces diarrhoea morbidity by 32%.

In Cameroon, water borne diseases are a major public health concern. Inadequate sanitation, improper waste disposal and limited access to portable tap water are some of the contributing factors to the high prevalence of these diseases. Common illnesses include Typhoid fever, cholera, bacterial and amoebic dysentery, and diarrheal diseases.

3. STUDY AREA AND METHODOLOGY

Bamenda City expands over the North-Western Plateau of Cameroon. It serves as the headquarters of the North-West Region and is the socio-economic nerve centre of the area. Bamenda is a primate city, surrounded by satellite towns like Bambui, Bambili, Bafut, Mbengwi, Bali, and Santa. Positioned between longitudes 10°09" and 10°11" East of the Greenwich Meridian and latitudes 5°56"N and 5°58" North of the Equator. This study is carried out at Bamenda III, located in the Northwest Region of Cameroon. It is situated within a highland area of the North West Region of Cameroon. The Bamenda III Council shows a wide variety in its relief, with altitudes ranging from 1300mm and 2600m above sea level (Samba & Kuma 2020). Many of its inhabitants are English speaking and Cameroonian Pidgin English is the main language spoken in the shops and the streets of Bamenda III. For over nine years, there has been an insurgency due to political tussles which have greatly affected community development in the area. In the absence of an industrial base, majority of the people of Bamenda municipality rely mostly on agriculture, small and medium size businesses (petty trading), the public service for their livelihoods. Bamenda III Municipality is an integral part of Bamenda City and Mezam Division. The Bamenda III Sub-divisional Council was created by presidential decree no. 2007/117 of 24th April 2007. It is made up of Nkwen and Ndzah village territorial communities. The natural site of Bamenda III consists of The Ndzah plateau to the South East, The Nkwen escarpments which divides Ndzah from Nkwen, undulating and well drained low lying terrain of Nkwen, Several waterfalls and streams dissecting the escarpment and low lying lands. Bamenda III is located between Longitude $10^{0}10'0''$and $10^{o}14'0''$E of Greenwich Meridian and Latitude $5^{o}56'0''$ and $6^{o}0'0''$N of the equator. Bamenda III is bounded by Tubah to the west, Bamenda I Sub-Divisional to the north, Bamenda II Sub-Divisional to the east and Bafut to the south. It has a total surface area of 22.9km2 (Samba &

Kuma 2020). Figure 1 below shows a location map of Bamenda III sub- division in Mezam division of the North West Region of Cameroon.

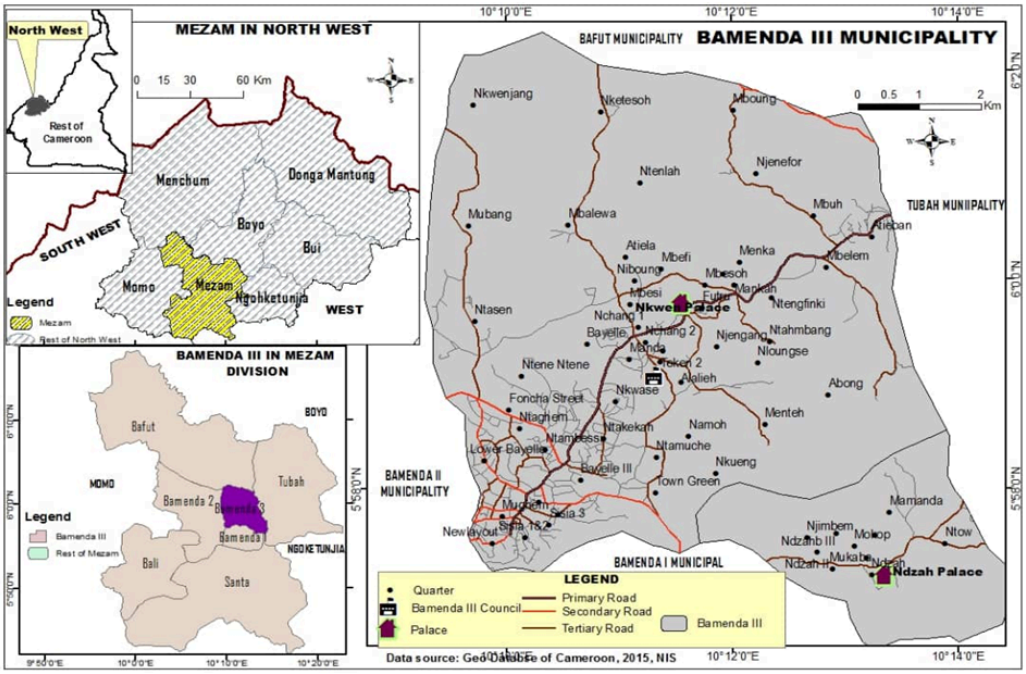


Figure 1: The map of Bamenda III Municipality
Source: Bamenda city council 2011



Figure 2: Water plant structure (water project Bamenda III)

The targeted population of the study includes the local population who are direct beneficiaries of the project in different quarters within Bamenda III municipality and stakeholders in charge of water development project. Employing Krecjcie & Morgan (1970) formula, a sample size of two hundred and two respondents (202) was arrived at using a proportional stratified random sampling technique. This technique was used to ensure that the quarter with the highest population also have more numbers in the sample. Five interviews were also conducted with officials in charge of the water development project at the Bamenda III Council. The total population of Bamenda III is estimated at one hundred and fifty to two hundred thousand people (150.000-200.000) according to official figures from the council.

The study as made use of some secondary data that was obtained from the Bamenda council development plan (CDP) like Information on the physical and human background of Bamenda III and the population statistics. The data was analysed using simple descriptive statistical tools like percentages, tables, and charts.

4. DISCUSSION OF FINDINGS

IMPACT OF COUNCIL WATER PROJECT IN BAMENDA III

The impact of the water project was determined by assessing the source and quality of water used by the inhabitants of Bamenda III as well as some of the water borne diseases which could result from the drinking of bad quality water and infrastructure.

Sources of water used in Bamenda III households.

Several sources of water were used in Bamenda III for households' activities such as cooking, laundry, bathing and others with bore holes (45.7%) and house taps (29.8%) being the most common. However, a few persons (3.2%) reported using streams for household activities. In a similar manner, most of the participants used borehole as a source of drinking water (57.4%) while a few used stream (3.2%). Public tap, community well, household taps and council water were used by 27.7%, 29.8%, 33.0% and 24.5% of participants respectively as a source of drinking water. Carole et al 2022 in assessing drinking water access in Menoua, West region found out that the main sources of drinking water included boreholes (69%), wells (13%), and rivers (12%), these figures and findings are closely related to my study indicating that most household use boreholes like main source of water, closely followed by pipe-borne and then wells and lastly rivers or raining streams.

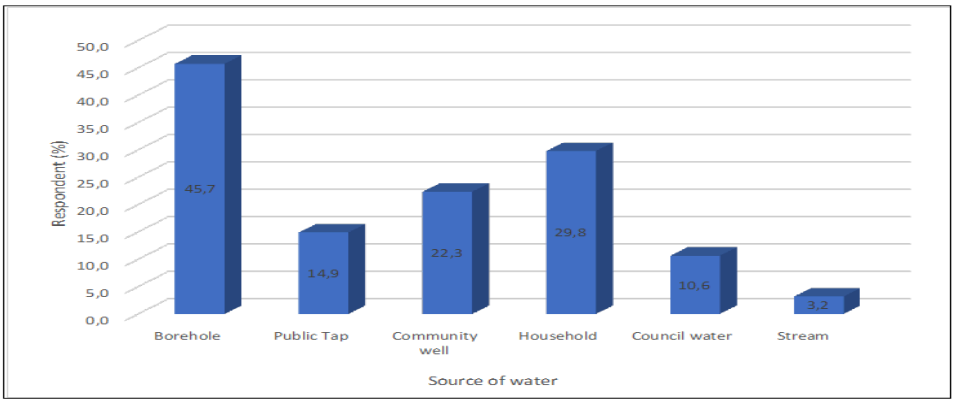


Figure 3: Sources of water used in households

Water challenges in Bamenda III

Several challenges were identified in the Bamenda III municipality. 22.7% of the sample population face the challenge of water borne diseases, 13.4% of the population face the problem of bacterial infection, 60% percent of the sample population trek for long distances to get water which is a challenge to them. 44.3% percent complain of poor quality of water to be their challenge and 4.1% had other challenges like the insecurity in some areas to get water which expose them to harm or put them in harm's way, some water sources are owned by individual and so they lock it at will which makes it difficult for some people to get water at certain times. Other challenges were exposure to rape, rashes due to poor water quality from some water sources.

These challenges were also echoed in the interviews. " *Portable drinking water is increasingly scarce in the community because of factors like population growth that has increased the quantity and variety of waste being dumped in nearby water sources, contaminating both surface and underground water sources. Unfortunately, most households are unable to afford bottled water, exposing them to numerous challenges associated with fetching water from long distances and health implications of consuming unclean water.*"

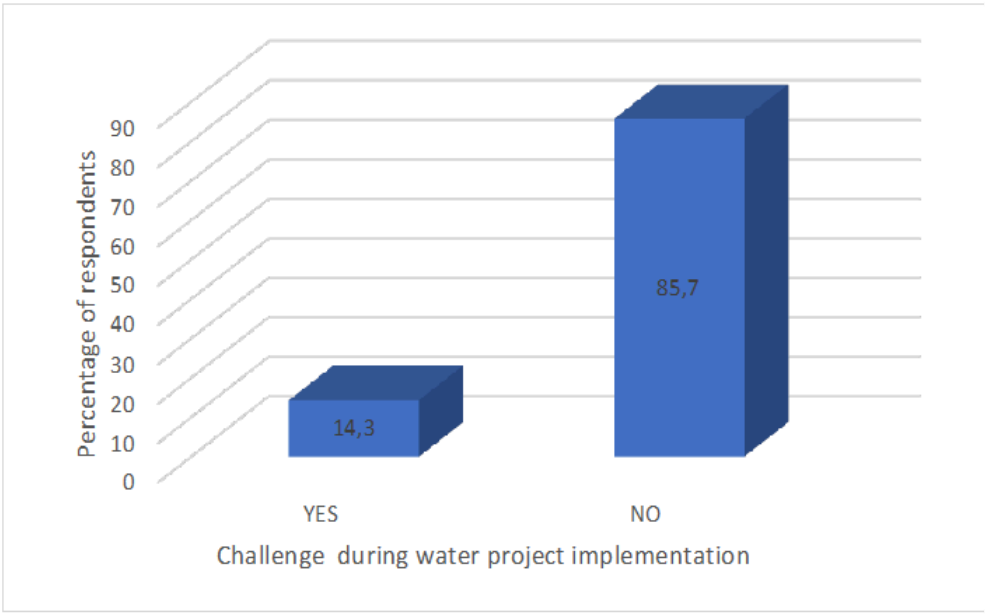


Figure 4: Challenges faced as a result of water scarcity.

Diseases resulting for water usage in Bamenda III

From the responses, inhabitants face different diseases resulting from the kind of water they use on daily bases. 56.0% of the sample population has been attacked by cholera resulting from the water they use, 41.7% have experience diarrhoea, 16.7% have suffer from dysentery, 23.8% have face the challenge of typhoid as a result of the water that is used, 6.0% have suffer from other diseases with relation to the challenges that come with poor quality of water and water management like Malaria, rashes, and itches on the body.

"*Bacteriological analyses of domestic water in some vicinities in our council area found faecal coliforms and specific disease causing bacterial. Water borne diseases are a major public health concern, with diseases like typhoid, diarrheal and dysentery being the most common diseases*."

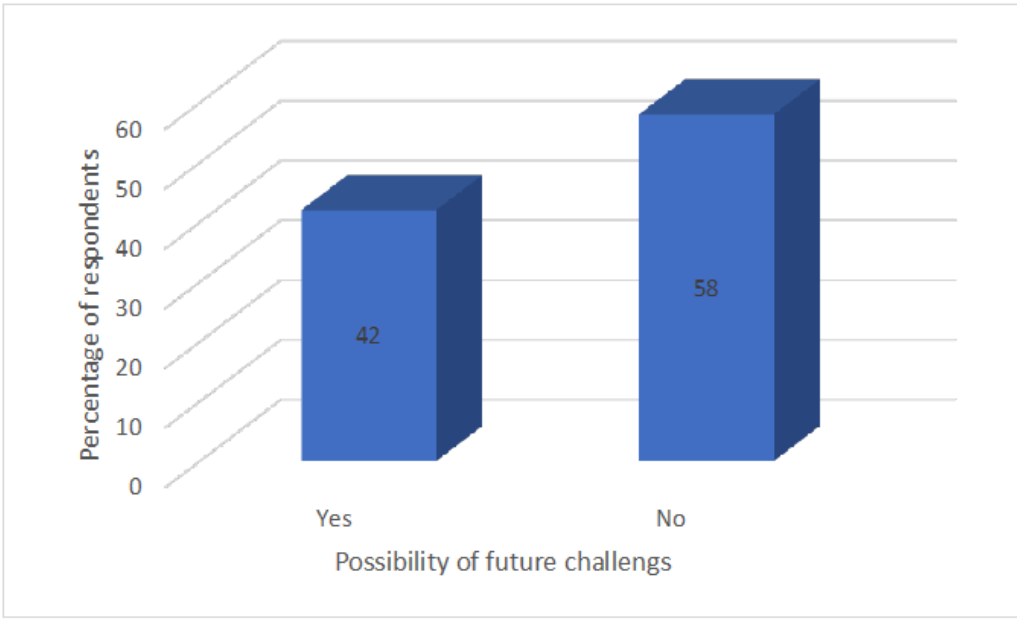


Figure 5: Diseases resulting from water usage

Quality of water used in households.

Rating of water quality from the sample population, 2.2% could boast of an excellent water quality used in their household 48.9% attested of having good quality of drinkable water in their household, 28.3% have bad quality water being used in their household and 20.7% from the sample population use very bad quality of water. This finding better explain the percentages of the sample population that face different types of diseases and challenges in relation to water. The 2.2% of the correspondent who boast of excellent water quality use the council water in their household. The inability of residents and the researcher to test the different water sources to determine the exact quality indicates that these Reponses are based on perception, and the diseases commonly associated with various water sources.

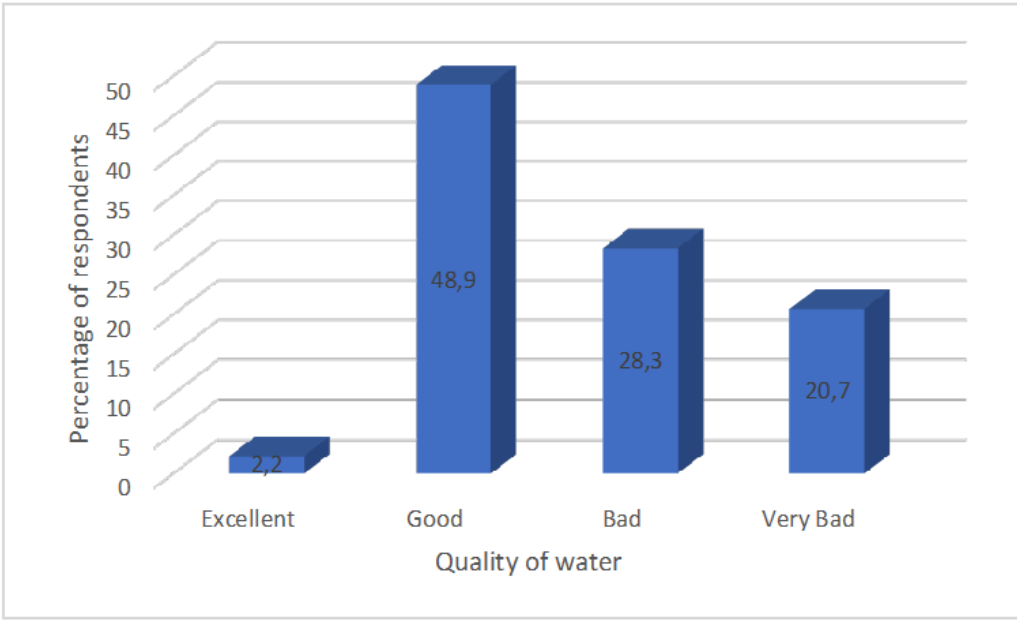


Figure 6: Water quality in Bamenda III

Impact of council water

According to findings, 55.6% have no access yet and used the council water which has reduced the level impact of the Bamenda III council water project as they still use their old sources of water and others are still face with the problem of water scarcity. Even some respondents around the water catchment say they have not felt any positive impact of the water project yet. 44.4% of the sample population have experienced the positive impact of the project. Though many people do not have the council water at household levels, they have the can access it at different water points installed by the council for example at Nkwen district hospital, Blessing patrol station amongst others.

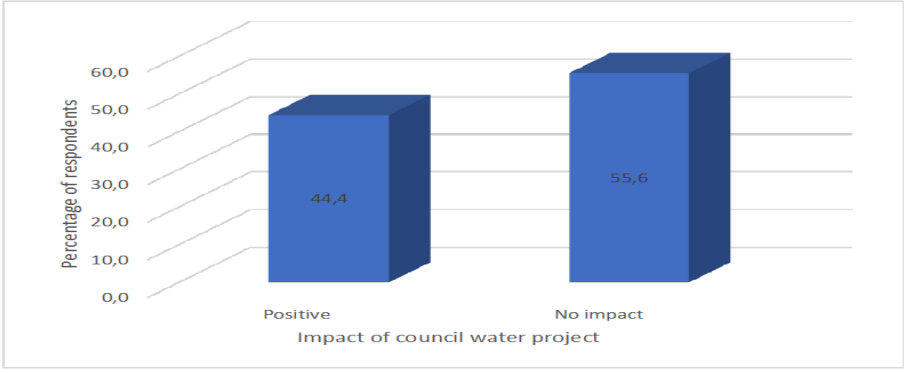


Figure 7: Impact of council water

Challenges associated with the council water project.

Challenge during implementation of water project

The implementation of the water project negatively affected 14.3% of the participants. One of the participant land was used for the implantation of the water plant and pipes passed through the house of some respondent from the water catchment to the plant in areas of their lands that was not comfortable to them but was there suitable for the water flow. Amongst the participants who were negatively affected during the implementation of the project, 90% reported that piped passed through their land and 50% reported that there was taken and used for the project, and only one person received compensation for the use of their land. This was also a major challenge for the Bamenda III council. That is getting a land for the water plant and negotiating with the owner of the land to accept the usage of the land for the water plant as revealed by the mayor of Bamenda III council. Other challenges he mentioned was they did not have experts around to assist in the construction and so they depended experts from Germany.

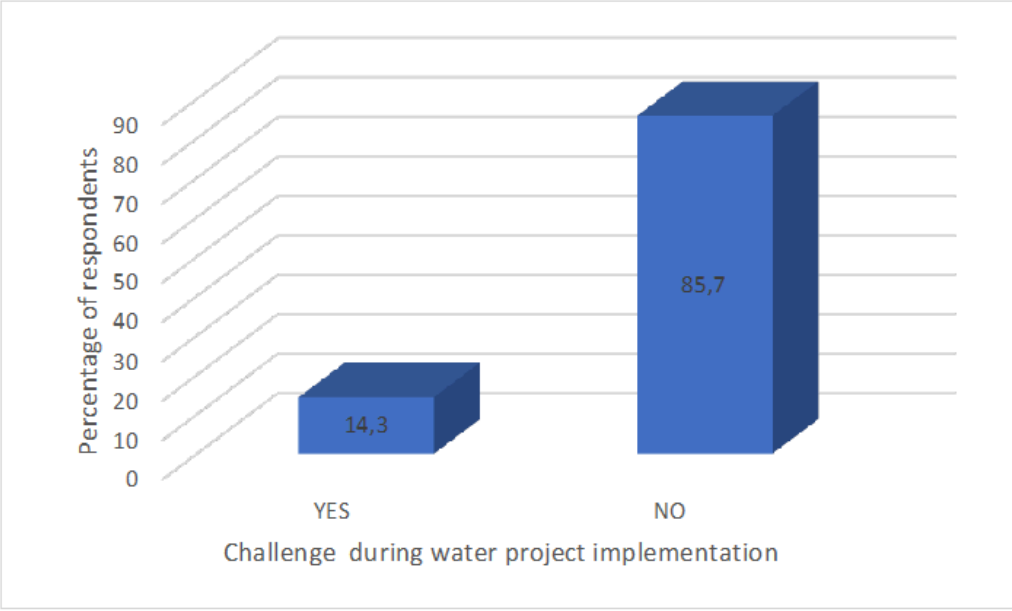


Figure 8: Challenges in the implementation of the project

From the data collected 58% of the participants don't see any possible challenge in the future while 42% of the participant forecast future challenges. Some of the future challenges identified by some of the participants included sustainability. From the interview with the mayor, he also see a future challenge of the plant not being able to be manage sustainably if engineers are not trained to handle and be able to repair basic equipment when they get bad. He said engineers will be trained purposely for the

management of the water plant to ensure sustainability and the usage by the future generation. Another future challenge that was identified by participants was that many households might not have the council water since it is costly and has a long procedure to have the water. This point was echoed in the interviews. "*you have to drop an application at the council requesting for the council water, pay the sum of two hundred and fifty thousand francs for a meter to be installed in the compound after which the customer has to be paying monthly bills to the council for usage*" This amount is quite costly for most households.

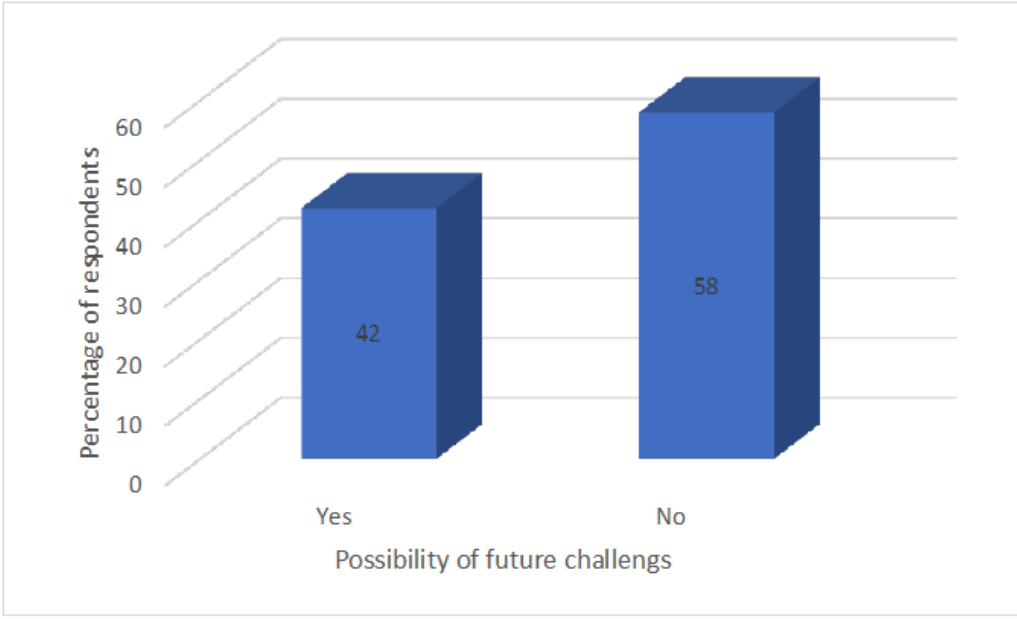


Figure 9: possible future challenges

5. RECOMMENDATIONS

Emanating from the literature search and the empirical survey of this research, it came to the understanding that, the water situation in Bamenda III and the council water project need more attention especially with the increasing population of Bamenda III. In relation to the water project and partnership, there are the researcher's recommendations for the Bamenda III council as regards the water project:

Collaborate with international organizations is highly recommended to the Bamenda III council. Bamenda III council can seek partnerships with international organizations such as UNICEF, or NGOs working on water and sanitation projects. These organizations can provide technical expertise, funding, and knowledge sharing to enhance the project's success.

Bamenda III council can also get engage in knowledge exchange. The council should actively participate in global forums, conferences, and workshops related to water and sanitation. This will enable them to learn from other successful projects and share their experiences, challenges, and best practices with the global community. This will help them in the sustainability of the project and to better manage the water plant in a way the future generation will benefit from the project just like the present generation.

Again, Bamenda III council should seek funding opportunities. The council should explore other funding opportunities available through global partnerships. This could include applying for grants, loans, or financial assistance provided by international organizations or donor countries that prioritize water and sanitation projects. This will help the council to get funds that they can distribute the council water to other areas of the municipality that have not had water due to financial constrain on the side of the council and at personal levels..

They can also leverage technology and innovation partnering with global technology companies or research institutions can help the council access innovative solutions for water management, monitoring, and treatment. This would enhance the efficiency, sustainability, and effectiveness of the project.

Also, the council should promote cross-sector collaboration. The council should encourage collaboration between various sectors, such as health, education, and agriculture, to maximize the impact of the water project. Engaging with global partnerships can facilitate such cross-sector collaboration and integration of services.

The researcher also recommend that the Bamenda III council should. Monitor and evaluate progress Regular monitoring and evaluation of the project's progress, impact, and outcomes are crucial. The council should collaborate with global partners to establish robust monitoring systems and share data to ensure transparency, accountability, and learning.

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Chapter 44: The Emotional Landscape in Zubeen Garg's Music: Cultural Identity and Collective Response in Assam

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Abstract

The objective of this study is to examine the dimensions of emotion and emotionality associated with Assam's musical icon, Zubeen Garg's music, his premature demise, and Assam's collective response to it. The paper further explores the emotional landscape reflected in his musical creations and how he himself became an embodiment of emotion. Through his musical expressions, Zubeen Garg bridged the gap between culture, tradition, and modernity, thereby establishing a deep emotional connection with his audience.The theoretical framework of this study is based on the concepts of emotion and emotionality in relation to Zubeen Garg's musical creations. It focuses on his emotional attachment to his people, his land, and its cultural identity, examining how these elements are reflected and communicated through his music. This study adopts an analytical methodology. The research is based on both primary and secondary sources. The primary sources include songs written and sung by Zubeen Garg, while the secondary sources consist of reference books, journal articles, newspaper reports, and internet sources. The study is expected to reveal that human psychology plays a crucial role in generating different emotional responses depending on circumstances. It also aims to demonstrate that social and cultural environments provide specific emotional scripts that guide human behaviour. Furthermore, the study anticipates showing that emotionality is shaped through processes such as reinforcement, identification, and imitation, which transform individuals into performers within emotional contexts.This research highlights that human beings experience psychological arousal and behavioural responses when they are in emotional states. It also emphasizes that Zubeen Garg's emotional engagement with music was a conscious and reflective experience, as he regarded music as the supreme reality of his life. Moreover, the paper underscores his profound significance among the people of Assam, where collective emotion transformed into social action, particularly evident in the widespread

response to his death. This perspective presents a world structured around emotion, manifesting across different times and contexts.

Keywords: emotion, emotionality, Zubeen Garg, Assamese, music, culture

Introduction

Human beings are subjected to psychological arousal, articulation, behavioural responses when they are emotional. Emotions may be overwhelming but short, very intense but fragile. Significant events transform human beings from the perspectives of bodily changes and mental state. There are innumerable instances in history which impact the psychology of human beings creating different emotions based on the circumstances. Sometimes these emotions haunt human beings in repetitive and inclusive ways. There have been genocides, displacements, depredations, wars, communal riots and number of other events in history which have left indelible marks in the minds. According to Thomas Dixon, "Historians of emotions ….show how arrange of phenomena including grief, rage, love, and joy, which we have learned to think of as vivid inner feelings—the pre-packaged properties of discreate individuals -come into existence in different ways through social performances, communal rituals and the following of cultural scripts and narratives." (124). Emotions, therefore, are not merely individual psychological states but are deeply embedded within social and cultural structures. Barbara Rosenwein conceptualizes such shared experiences as "emotional communities," where individuals collectively express and negotiate emotions within specific sociocultural frameworks. These emotional communities help us to delve deeper into sociocultural study of emotions specifically during certain circumstances which might have tremendous influence on a particular society. Without emotions the human world cannot survive. Emotions help us to establish relations, engage in meaningful work and stay healthy and happy; emotions have commanded scrutiny for centuries. "Even the Stoics, who recommended that people extirpate emotions from their lives altogether, devoted a good deal of time to understanding emotions' effects" (Mc Clure 3). The present study examines how the music and public persona of Zubeen Garg contributed to the formation of a collective emotional identity in Assam, particularly during moments of political unrest, cultural transition, and collective mourning.

The concept of emotionality refers to the behavioural and physiological reaction to the emotions. Emotional responses may remain internalized or may be communicated socially through language, gesture, music, and ritual practices The emotional underpinnings in different situations can contribute to the formation of

emotionality which originates in the central nervous system. The responses vary according to the electrical function of the brain. Schachter and Singer's cognitive theory of emotion emphasizes the relationship between cognitive interpretation and physiological arousal in the creation of emotional experience. William Reddy considered emotions to "drafts" with the help of which we can convey our feelings. Emotions are produced by cultures. "Emotions are social constructions, and emotions can only be understood fully if one's actual experience of them (as opposed to the mere expression of them) is analyzed in relation to social contexts" (Mc Clure 112). Certain social environments produce particular emotions and also the ways of the expression of such emotions. The social and cultural environment provide definite emotional scripts and people act accordingly. The emotionality is shaped by reinforcement, identification, and imitation which subsequently transform people into skilled performers in emotional situations. Emotional outpourings are very much visible in celebrity deaths. In such a situation an individual builds a strong sense of connection with a celebrity, media person even without reciprocity. This is termed as parasocial relationship coined by psychologists Donald Horton and R. Richard Wohl in 1956. This relationship is inherently imaginary but people feel a kind of intimacy which is largely illusionary with the celebrity. This relationship might be sometimes healthy and unhealthy triggering emotions like companionship, friendship, attraction, hatred, delusion, infatuation etc. Different social media platforms help people in participating in parasocial relationships. "It has transformed the way people interact, share information and consume news and entertainment" (Ravi & Patki). India is a land of celebrities. Dozens of cinema and media personalities work in Bollywood and regional film industries of India. Apart from these there are lyricists, singers, instrumentalists who are successful in making an impact in the lives of common people. Zubeen Garg of Assam is one such celebrity who will be remembered by the Assamese people for centuries. This paper argues that the cultural phenomenon around Zubeen Garg demonstrates how celebrity figures can become catalysts for collective emotional identity, political consciousness, and regional solidarity in Assam.

Zubeen Garg and Assamese Cultural Identity

Zubeen Garg, often termed as the cultural icon, emotional voice of Assam and *Ishwar putra* (son of God) had a profound impact upon Assamese society across generation. His artistic persona transcended the conventional boundaries of celebrity culture and evolved into a symbol of collective Assamese consciousness. The news of his reported death on 19 September 2025 in Singapore generated unprecedented emotional reactions across Assam and Northeast India. The people of Assam could not accept that the most loved son of the soil Zubeen *da(*brother) was no more.

emotions are culturally mediated; namely, any sort of emotions, be it moral, primary, secondary, programmatic, anticipating etc. is: (a) elicited and

experienced relationally and situationally(b) expressed according to social conventions (feeling rules) and structures of feeling which make for its valence, arousal, and potency, (c) discursively narrated within and through language games partaking thus in identity and will formation processes (Demertzis 5).

This gives the view of a world centred in emotion which structures and demonstrates in different times and situations. Zubeen's death sparked massive emotional outpourings, by the people of Assam and the entire Northeast India. The widespread grief and unrest paralyzed the whole of Assam for a week accompanying violent clashes between police and the civilians. Educational institutions, offices remained closed, people organized candlelight vigils, gathered collectively in towns and villages singing his songs and mourning his absence. There were no positive or happy emotions during those days. People of Assam were either shedding their tears in front of Garg's portraits or demanding justice for Garg. Every single Assamese experienced the same emotion of a great loss, a void with the demise of Zubeen. These reactions may be interpreted through the theoretical framework of collective emotionality, where grief becomes socially shared and culturally mediated.

Born on 18 November 1972 in Tura to Ily Borthakur and Mohini Mohan Borthakur, Zubeen Garg displayed musical talent from an early age. His mother became his first musical mentor. He had two sisters, Jonkie Borthakur and Palme Borthakur. Personal tragedies, including the death of his mother in 2000 and his sister Jonkie Borthakur in a road accident in 2002, deeply shaped his emotional and artistic sensibilities. After his sister's untimely death, he released an album *Xixu* in the year 2002 itself. Emotions indicate values and needs, but also at the same time emotions motivate behaviour. Zubeen's father expresses in his book *Pitrir Dristit Zubeen* (*Zubeen: Through the Eyes of His Father*) on his son's emotional state after this terrible loss. Zubeen's father could relate that Zubeen's traumatic emotion could be the cause of a distressed life and it might mislead him towards a bleak future. A close and intentional examination led Borthakur to organize the marriage of Zubeen with Garima for a stable companionship for "emotions enable bonding and facilitate social interactions critical to survival" (McClure104). He married Garima Saikia Garg, a fashion designer and film producer in the year 2002. This bonding probably helped Zubeen to manage his emotional turmoil enabling him to live his life meaningfully through his artistic creativity and music. They did not have any children of their own but adopted fifteen children together. Zubeen's musical career began when he was only three years old. His mother was his first guru. Zubeen Garg became an overnight sensation with the release of his first album *Anamika* when he was only nineteen years old. Mostly he sang songs in Assamese, Hindi and Bengali. Apart from these three languages he sang in forty languages of the North east and the entire India.

The year 1989-90 was a turning point in the life of Zubeen Garg. The then chief minister of Assam Shri Hiteswar Saikia travelled with Zubeen and other students to

Madras (now Chennai) to attend a function organized by the Assam Students Association, Madras. Zubeen quickly learnt two Tamil songs and sang them along with Assamese and English songs. His father writes,

1989-90 sonor ei ghotonai Zubeenor mon xongeetor proti aru tibro kori tulile. Jibonor lokhyo nirdharon koriboloi ahori nohol. xongitei teuk Bombay obhimukhe tani nile. Onishichito aru otibo kostokor jatrat B. Borooah Collegeor Class tate pori thakil (Thakur 22-23).

(This incident of 1989–90, drew Zubeen even closer to music. He did not respite to consider his goal in life. But music gradually became his calling, pulling him toward Bombay in search of opportunities. In the process, he left behind his classes at B. Borooah College, embarking on an uncertain and often painful journey to pursue his dreams).

Zubeen's emotion was a conscious experience and reflection as he considered music as the supreme reality of his life. It was his profound emotion in the sense that he believed it to be essential for his mental health and physical survival. He even sacrificed his formal education and his home for music. He was a very good student and a voracious reader. He used to read different types of books both in Assamese, Bengali and English and the information that he derived from books served him very well to know and understand the culture and people of different geographical regions. "For many people, emotions are stimulated and provoked by beauty in the arts and nature, and there is no aesthetic sensibility without emotion" (Britannica). Therefore, the urge for aesthetics led Zubeen to pursue his career in music.

There are epistemic emotions which promote our thirst for knowledge and information. Zubeen was curious enough to know the wider world of music. He travelled to Bombay and stayed there, but the fast and mechanical life style in the metropolis did not suit him. "Emotions are notoriously apt to make us act in ways we regret" (Standford Encyclopaedia of Philosophy). He regretted his strong emotion which pulled him towards Bombay but later on he left the metropolis and came back to his homeland, Assam, where he once again started his musical career. He was in search of a solid identity in his formative years and beyond and he knew he would get it in his own homeland. "The fact that an emotion can sometimes be wrong is not just an epistemic matter but a matter of ethics in a broad sense of that word" (Sousa xviii). His wrong emotion during his formative years landed him in an unknown land (Bombay) which is devoid of any emotion. Emotion becomes social action when it is transformed into emotionality.

Social emotions may provide the motivation to form and maintain social bonds, but communicating those feelings enables individuals to reach beyond their private feelings to make social contact. Emotion accomplishes very little in the social world unless it is communicated. (Planalp 138).

Music, Resistance and Emotional Politics

For Zubeen Garg, music was his being, his soul and his strength that could bring calmness to his character and life. He saw that Assam had music everywhere; among its people, in its rivers, trees, forests, in its hills and plains, in the folklore of its natives. He began to study nature, seasonal changes, the ethnic groups, the hues of languages and cultures of the northeast. Probably, he could be placed right after x*udhakontho,* Dr. Bhupen Hazarika in understanding the Northeast, Assam, its politics, culture, social structure and people.

Zubeen gradually became the heartthrob of the young generation and apple of the eyes of the elders. He became the sensation, an emotion. *Bihu* and other festivals of Assam could not be organized without the musical performance of Zubeen Garg. He became the 'celebrity' without question. He broke the stereotypical Assamese singing style and started a style of his own….the pop style….

Maya, maya mathu maya
Tumi janu xosane, moromore maya
(Illusion, only illusion
Are you the truth, my dearest illusion).

The emergence of Zubeen Garg during the 1990s coincided with one of the most turbulent political periods in Assam's history. The decade witnessed insurgency, ethnic conflicts, militarization, and widespread social anxiety associated with the activities of the United Liberation Front of Assam (ULFA) and subsequent military operations conducted by the Indian state. The Indian government sent army to Assam which carried on operations like Bajrang Operation and Operation Rhino, which resulted in clashes, raids and allegations against them for involving in human rights abuses. Against this backdrop of fear and uncertainty, Zubeen Garg's music emerged as a powerful cultural expression of resistance, alienation, and emotional unrest. He fought alone against dominance, power and exploitation through his musical creation and his thoughts. In the words of Bhabha, he wanted to find out "the grounds of historical necessity for elaborating empowering strategies of emancipation, staging other social antagonisms" (171). Zubeen proceeded to explore a cultural space beyond societal restrictions and norms. He replaced the hierarchy and subordinations by a certain form of discontinuity of the known musical forms in Assam. Unlike conventional Assamese singers of earlier generations, Garg introduced a musical style that fused Assamese folk traditions with pop, rock, and contemporary global influences. This fusion represented not only a musical innovation but also a symbolic challenge to cultural stagnation and social conformity:

Diya ghurai diya prithibi amar/Prithivi bhonga aru gorhar xopun notun
Kotha kuwar odhikar amar/nijok suwar odhikar amar
Ondho xaxon bhondo xaxok ortho lubhor nogno jujot
Swadhinotar buj loutei exo bosor hol/Bishnu-Jyotir junaki dex etiyau nohol
Likha hobo akou notun itihax/bhondo xomajor hobo porihax

Ami jen jontro/eku ekuta jontro
(Give us back our world/fresh dream of destroying yet preserving it
We claim our voices/we claim our vision
Blind rule, false ruler's reign/naked war waged in greed for wealth's gain
A hundred years have drifted in knowing freedom/ yet the starlit country of Jyoti-Bishnu has not formed.
New history will rise/the brittle mask of this society will crack
We seem to be like machines/one echoing another).

Through such compositions, Garg articulated the frustrations of a generation experiencing political violence, state surveillance, and cultural disillusionment. Zubeen saw how the state sponsored violence killed thousands of innocent Assamese. People in Assam lived through a phase of trauma and anxiety. Nobody had any clue when the army might break the door of a house and drag a youth while he was sleeping. Nobody had a clue when, who, and how he was killed later on. But Assam was reeling with fear, the parents of young lads in the rural areas of Assam could not sleep at night as the army's surveillance was hovering over each such house. *Anamika*, Zubeen's album accompanied the trauma and loss of each Assamese family. Megha Kashyap very truly comments, "If Cuba had Fidel Castro, we had Zubeen Garg. His larger than life personality encapsulated rebellion against oppression and exploitation of common people" (The Wire).

He became the voice of a rebel who expressed his thoughts louder than anybody in Assam. *Mur kunu jati nai, mur kunu dhormo nai, mur kunu bhogoban nai. Moi mukto. Moi kanchanjangha. (*I have no caste, I have no religion, I have no God. I am free. I am Kanchanjangha). This is a dialogue written by Zubeen himself for his film *Kanchanjangha*. These are the powerful lines by Zubeen which have been repeatedly stated at present after his demise. There is a sense of unburdening, liberating himself from the shackles of labels, boundaries and prejudices. His emotion of defiance mixed with relief gives hope to a people, to a community paving the way towards liberation, clarity and rationality. The emotional elevation while mentioning the third highest peak of the world is prominent which symbolizes his identity as elemental and immovable like the Kanchanjangha. In the poem "London", William Blake writes: "I hear the mind-forged manacles I hear." Blake also wants to break free from man-made institutions that curb human spirit and freedom. Zubeen's way of declaring himself as Kanchanjangha also relates to Blake's idea of the imagination as divine, integrated and beyond human categories. There is always an emotional relationship between an artist and the society. Garg had a great creative impulse but there was the lack of a definite platform where his creativity could be expressed and disseminated at the same time. Instead of a bourgeoise or elite culture, he embraced a culture of the masses. He not only sang pop and rock music but also, he sang *bhajan, ghazal, borgeet, loko geet* etc. He fusioned folk music with pop music which proves to be an expression of resistance.

He ridicules the practices of the system and opens up spaces to see things differently through his music. Zubeen became a movement…a movement of resistance and change.

In Assam the colonialist ideology was still lingering in the young minds of the 80s. Specially those children who studied in convent schools they listened to Michael Jackson, Madonna, Whitney Houston, Tina Turner but were not fully satisfied. Some of them were attracted by singers like Cliff Richard and The Eagles. "Hotel California" out of 205 Eagles discography became one of the iconic songs sung by many young singers. Some Assamese lovers of Western songs hum the hits of Eagles even now. But the void was still there. The new generation was in quest for a new musician singing in the Assamese language, "*Xokoluwe xondhan korisil notun xur, notun loi, notun abexor geet. Pise xeixomoyjen ot axomor xongeet jogotot biraj kori asil ek birat xunyotai*" (Das 42). (Everyone was in quest of a new tune, new rhythm, new emotion. There existed a huge void in the musical world of Assam). Some of the Assamese singers apart from Bhupen Hazarika, there were others like Khagen Mahanta, Dipen Barua, Ramen Choudhury, Pulok Banerjee etc have sung wonderful songs but are unable to cast a long lasting impression on the people of Assam basically the young minds. There was despair everywhere. People could not find a favourable voice in Assam who could speak in their tone, whom they could rely on, who could create something that is unusual, very modern and emotional too. Sartre has stated a significant statement on the presence of despair in the context of human emotion:

> As for despair, the term has a very simple meaning. It means that we shall confine ourselves to reckoning only with what depends upon our will, or on the ensemble of probabilities which make our action possible. When we want something, we always have to reckon with probabilities (33).

The probabilities are expected when people want something. People counted on the arrival of an entity who could be a life changing factor of an enraged community. Zubeen's *monor nijanot* (In the crevice of the mind) signals sad reality of a community's existence or a sad romantic story. The young musician expresses his helplessness, his failure leading him into the cycle of hope and hopelessness. According to the 21st century cultural theorist Lauren Berlant this feeling may be referred to as "cruel optimism". Along with harmful structures of feelings, she includes the imagination of lifelong romantic love in her understanding of cruel optimism. *Tumar moromor xubax xani loi/hothate xukale puhoror phuloni* (The fragrance of your love/ The garden of light has abruptly dried).

Zubeen expressed his anger when he was not satisfied with the affairs of his state and people which reflects his sense of belonging and selfless love. Aristotle also talked about an angry person and a person who is completely virtuous. If a person is

never angry then this is a slur upon his character and is also insensible. Zubeen did not hate anybody which is different from anger. His anger has a higher functional value and is more rational. Therefore, it could be argued that his creativity soared higher and his genius unfolded. He did not want to be dominated and marginalized by any power. He sometimes went against the norms of the society. He did not converse in a formal way in interviews. Sometimes he even climbed the post of the stage while singing. He faced criticism regarding his behaviour, his conversation and his dress. But he was a man who internalized the ideas of Bob Dylan who opined, "I think of a hero as someone who understands the degree of responsibility that comes with his freedom" (Dylan 1985). Bob Dylan is one of the most influential modern musicians who expressed his opinions on freedom, conscience, and power through his musical compositions. He believed in the connection of moral and social responsibility with power and freedom. This message refers to the notions of empathy, resistance and awareness together. Zubeen Garg was also able to create an impression on the masses through his unwavering love for them and his homeland. Like Dylan he was also deeply influenced by Assamese folk tradition and focused on songwriting, singing his own songs and making musical adaptations of poems. He blended poems with melody and harmony. Zubeen mingled the concept of freedom with the concept of light:

Jogot puhor kori ahibo plabon
Atorabo omanixa bodhibo Ravan
Nika hobo xomaj
Xex hobo ei pap
Phuli robo prem xotodol
(Flood of light will light up the world
It will destroy the darkness and vanquish Ravana
Society will be purified
The sins will come to an end
And the lotus of love will bloom).

He is now influenced by the positive emotion of happiness which he derives from his musical compositions and singing. Positive events generally lead to occasional reactions of happiness. Zubeen is exuberated when he gives away his jacket to an old man. He finds peace of mind when he sits and has *roti sabji* sold by a roadside vendor, he is delighted when he spends time in the woods and holds a tree. Happiness thus is derived from the pursuits rather than attaining the end of the task. He blended with his people and land developing a sense of cultural intimacy, "cultural intimacy provides insiders with the assurance of common sociality, and a familiarity with the bases of power that may at one moment ensure the disenfranchised a degree of creative irreverence and at the next moment reinforce the effectiveness of intimidation (Herzfeld 2005: 3, 9). We find in Zubeen Garg's nature deviating from formal rules

and also official public interest. He is true to his emotions, he expresses himself without fear:

Xobdo jodi prerona hoi
Xobdo jopdi xokoti hoi
Xobdo aji jkio xonkito
Xobdo jodi bornobrikhyo
Xobdo jodi siroo xuddho
Xobdo aji kio xonkusito
Xobdo aji baakruddho
Xobdo aji kararuddho
Xobdo aji nijei nijot aboddho

(Word, if it is inspiration,
Word, if it is strength,
Why then word is so frightened today?
Word, if it is a tree of letters,
Word, if it is eternally right,
Why then is word so constrained today?
Word today is speechless,
Word today is imprisoned,
Word today is trapped within itself).

His anguish over on the plight of word which cannot express itself, traumatized and trapped has been expressed in this beautiful song he composed. Manoj Kumar Borthakur in one of his articles in a leading newspaper of Assam has rightly commented:

> Zubeen never showed any inclination towards party politics; instead, he sang and worked for a society that could survive and flourish without narrow political narratives. Every conscientious citizen feels that voters should not be hijacked into making emotional political narratives. Rather, they should use their ability to analyse the issues confronting the Assamese community rationally (6).

The repressive notion of power and the purposes behind it makes Zubeen to sing about words which have lost its grandeur and freedom due to the exertion of power by the agencies of control. When freedom of expression is lost, that becomes a threat to the existence and identity of people. A human being is than controlled valorised and shaped by a particular powerful system and Zubeen was absolutely against this system.

Collective Mourning and Emotional Fusion

Zubeen's emotions not only refer to his individual feelings but also embodied experiences. His emotionality is linked to the relational and socially mediated practice of feeling connected with the expression of emotions that shape particular ways of knowing, being, and belonging. Drawing on Bourdieu as a conceptual frame, emotionality encompasses the feeling practices that foster connectedness and

belonging, turning individuals into active agents of social knowledge. Emotions are critically attributed to the construction of emotionality that is shifting and contested in links to temporality and unsettledness of transience. Zubeen sang almost forty thousand songs from 1992 to 2025. In these songs he expressed varied emotions and emotionality of happiness, frustration, sadness, helplessness, anxiety and rebelliousness.

This simple and kind hearted generous man was victimized by some people behind him, he did not realize how he was used a commodity, how his money was squandered without his knowledge. He did not have any information about how much he earned in each performance. His wife Garima Garg is also not aware of the issues involved with finance. Public speculation and social media discourse generated multiple narratives regarding the circumstances surrounding his death. It has become a state wide sensation that he did not die of a heart attack in the sea water in Singapore. The truth is Zubeen Garg is no more. A legend has died, a song has been erased, a profound emotion bridging generations has been destroyed. The cultural identity, the pride of Assam, the music covering the spectrum of human emotion has been killed. Millions of people all over Assam and the north east are still grieving. Social media movements such as #JusticeForZubeenGarg transformed private grief into collective political expression. Millions have participated digitally and physically in mourning rituals, public gatherings, candle marches, and musical tributes. The mourning process demonstrated how musical figures can become emotionally integrated into regional identity formation and collective memory Zubeen has made people crazy with his melodies. With his death there are news of some youth committing suicide due to overwhelming emotional stress.

mayabini ratir bukut,
dekha palu tumar sobi,
dhora dila gupone ahi hiyar kunot…
(In the bosom of the enchanting night,
I saw your image;
secretly you appeared and touched a corner of my heart).

This song gradually evolved into a cultural anthem of remembrance after his death. It is sung everywhere-- not only in cultural shows, festivals but also in the educational institutions. Zubeen and Assam are synonyms now. Zubeen and Assamese emotion are also synonyms. Zubeen can never be past but is always present. This is the collective emotion of the people of Assam after his death. “A positive correlation exists between the strength of the event as we perceive it and emotional intensity; the stronger the event is, the more intense is the emotion. This correlation, if true, is valid regardless of social or personal constraints” (Ben-Ze’ev 113). His death has become a unique phenomenon in the macro-level, emerging from the same emotional state experienced by the Assamese people. Group identification is an important feature of

collective emotion. Though they do not know each other but they can identify themselves as one and this helps the groups organize themselves. When Zubeen's body was carried to the cemetery in an ambulance lakh and lakhs of people gathered from all over Assam, the northeast and even from some regions in India. This collective emotion may be understood in the magnitude level when emotions are experienced together. Increased intensity is a specific feature of collective emotion. Although, after a certain period of time the collective emotional responses calm down but in some cases the intensity is not lost. People are now in the quest of a substitute of Zubeen Garg on stage. Some singers both male and female are trying to sing his songs but it is not easy to reach the extraordinary musical range of Garg. Recently a young singer named Rahim Raj has been able to do some justice to the songs of Zubeen Garg. People are thronging to the places where Rahim is invited to listen to the songs of Rahim. Thus, the collective emotion of Assam has given altruistic and productive result to an extent which has helped to unite the Assamese people and flourish together. Zubeen became the eliciting target of emotional display by a group which led to emotions like grief and anger at the same time. These are negative emotions but according to some scholars like Butler, these emotions have the power to build coherence and integrity among groups. Gerard Thonhauser calls this as "emotional fusion" which according to him "refers to cases in which the dynamical self-organization of the collective becomes so strong that the participants feel themselves as part of bigger unity that overrides their individuality" (39). The collective mourning surrounding Zubeen Garg reflects what scholars describe as "emotional fusion," wherein individuals experience themselves as part of a larger emotional unity. The emotion of the Assamese people regarding Zubeen Garg is a special phenomenon never occurred earlier in the history of Assam, not even in India. They have engaged themselves in collective emotion through social media which have also helped in synchronizing their thoughts to stand unitedly against those who killed Garg if at all it was a murder and stand for justice. This has stimulated a sense of shared belief and also social belonging which have led not only the Assamese people but the people of Bengal, Maharashtra to utter this phrase together "*joy Zubeen da*" (hail Zubeen brother or long live Zubeen brother).

Conclusion

The emotional landscape of Zubeen Garg's music represents a crucial cultural phenomenon in contemporary Assam bridging the gaps between culture, traditions and modernity. His songs articulate the emotional experiences of love, resistance, grief, hope, and social belonging. More significantly, Garg transformed music into a participatory cultural space through which Assamese society negotiated questions of identity, political anxiety, and collective solidarity.

The emotions of ecstasy and agony have been manifested from time to time by people along the lines of social cognition and behaviour. When Zubeen spoke on

various occasions, people thronged to listen to him, he spoke in a very informal way in public gatherings which filled up the minds of the masses with ecstasy. When he had a performance people waited eagerly in front of the stage till midnight and eventually when he came to the stage, a sort of euphoria could be seen among the audiences, cheering him all throughout. Even when it was a rainy night people jumped into the mud and danced in the tune of Zubeen's musical renditions which shows collective embeddedness. Though they are different individuals but thy share the same values and beliefs and mutually experience convergence in emotional responding. The cultural environment created by Zubeen Garg through his composition of lyrics has transcended the individual emotional landscape to collective based sentiments imbibing a spirit solidarity between different religious and ethnic groups of Assam. This is perhaps the greatest contribution of Zubeen Garg. He is no longer an individual but a movement, a revolution who has been able to organize non-institutionalized challenge to authorities and hegemonic cultural and social practices. His emotional landscape was democratic, activist nature and a more participatory one which attracted young and old all over Assam and the Northeast. His songs have the power to that defining a culture, carrying an emotion which is beyond time, language and borders. His songs express the emotional essence of love and separation, a rhythm of everyday life, fearless spirit of a generation which refuses to bow down, celebrating, nature, culture and the spirituality of Assam. He adheres to the tradition of Assamese past and also expresses the secular demands for modernization. More significantly, Garg transformed music into a participatory cultural space through which Assamese society negotiated questions of identity, political anxiety, and collective solidarity. Thus, Zubeen Garg can be understood not merely as a singer or performer but as a cultural movement whose artistic legacy continues to shape the emotional and political imagination of Assam.

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Chapter 45: The Impact of Social Inequality on Social Justice: Strategies for Building a Fair and Inclusive Society

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Abstract

Social inequality is one of the most serious challenges in modern society because it creates unfair differences in access to education, healthcare, employment, housing, legal protection and other basic opportunities. These inequalities mainly affect poor families, women, minority groups, rural communities and people with disabilities, preventing them from enjoying equal rights and improving their quality of life. Social justice is important in addressing these problems by promoting fairness, equality, inclusion and human dignity. A peaceful and developed society cannot be achieved when large groups of people continue to face poverty, discrimination and social exclusion.This study examines the impact of social inequality on social justice and explores strategies for building a fair and inclusive society. The main purpose of the study is to identify the major causes of social inequality, analyze how these inequalities affect social justice and peaceful social development and examine practical solutions for reducing inequality and promoting fairness in society. Key issues discussed include poverty, unemployment, unequal access to education and healthcare, gender discrimination, weak governance, corruption and poor public policies.The research uses a qualitative approach with a descriptive research design and is mainly based on secondary data collection. Information was gathered from books, academic journals, research articles, government reports and reliable online sources. The data was analyzed using thematic analysis to identify major patterns and common issues related to inequality and justice.The findings show that poverty, unequal education, healthcare inequality, gender discrimination and weak governance are major causes of social inequality. These factors lead to social exclusion, frustration, crime, mistrust in institutions and barriers to national development. The study concludes that equal access to education, healthcare, fair employment and strong public policies are essential for promoting social justice and building a peaceful, fair and inclusive society.

Keywords: *Social Inequality, Social Justice, Equality, Human Rights, Inclusive Social*

Introduction

Social inequality is one of the most serious problems in modern society. It happens when people do not have equal access to basic needs and opportunities such as education, healthcare, employment, housing, justice and social protection. Some groups in society enjoy more privileges, power and resources, while others face poverty, discrimination, exclusion and limited opportunities simply because of their social class, gender, ethnicity, religion, disability, or place of living. This unequal treatment creates unfairness and weakens the foundation of a peaceful and developed society. Social justice is the idea that every person should be treated fairly and should have equal rights and opportunities regardless of their background. It focuses on reducing discrimination, protecting human rights and ensuring that everyone can live with dignity and respect. A socially just society does not only provide freedom, but also creates systems that support equal participation in education, employment, healthcare and decision-making processes. Social justice helps people feel included, valued and protected within society. In many countries, social inequality continues to grow due to economic differences, political imbalance, corruption, poor public policies and unequal distribution of resources. People living in rural areas often face fewer opportunities compared to those in urban areas. Poor families may struggle to provide quality education for their children, which create a cycle of poverty across generations. Women and minority groups may also experience unfair treatment in workplaces and legal systems. These inequalities can lead to frustration, social conflict, crime and mistrust toward governments and institutions.

Building a fair and inclusive society requires strong efforts from governments, communities and individuals. Public policies must be designed to support equal opportunities for all citizens. Access to free or affordable education, proper healthcare services, fair employment opportunities and equal legal protection are essential steps toward social justice. Awareness programs, community participation and responsible leadership also play an important role in reducing inequality and promoting peace. This research aims to examine how social inequality affects social justice and to identify practical strategies for creating a more equal and inclusive society. It explores the major causes of inequality, its impact on individuals and communities and the role of social justice in promoting social harmony and sustainable development. Understanding this relationship is important for building societies where fairness, equality and human dignity are protected for everyone.

Research Problem

Social inequality has become a major challenge in many societies around the world. Although people are expected to have equal rights and equal access to opportunities, the reality is often very different. Many individuals still face unfair treatment because of poverty, gender, social class, ethnicity, disability, religion, or where they live. Unequal access to education, healthcare, employment, housing and legal protection creates serious social problems and prevents many people from improving their lives. These inequalities create a gap between different social groups, where some people enjoy privileges and security while others struggle to meet their basic needs. This situation affects not only individuals but also the peace and stability of society. When people feel excluded, ignored, or treated unfairly, it can lead to frustration, anger, social conflict and even crime. Lack of social justice reduces trust in governments, institutions and legal systems. It also weakens national development because a society cannot grow peacefully when a large number of people are left behind. In many developing countries, poor public policies, corruption, weak governance and unequal distribution of resources make this problem even worse.

Therefore, the main research problem of this study is to understand how social inequality affects social justice and how societies can reduce these inequalities to create a fair and inclusive environment for all people. This research focuses on identifying the major causes of social inequality, examining its impact on social justice and exploring practical solutions that can support equality, human rights and peaceful social development. The first objective of this study is to identify the main causes of social inequality in modern society. This includes examining factors such as poverty, unemployment, unequal access to education, healthcare differences, gender discrimination, social exclusion and weak government policies. Understanding these root causes is important because inequality does not happen by chance; it is often created and maintained by social, economic and political systems. The second objective is to examine the impact of social inequality on social justice and peaceful social development. This objective focuses on how unfair treatment and unequal opportunities affect people's daily lives, mental well-being, trust in institutions and participation in society. It also studies how inequality can lead to social conflict, crime, violence and long-term instability when people feel that justice is not equally available to everyone. The third objective is to explore effective strategies and policy solutions for building a fair and inclusive society. This includes analyzing the role of governments, public institutions, communities and individuals in promoting equality and social justice. Solutions such as equal access to education, fair employment opportunities, healthcare improvements, legal protection and responsible public policies will be discussed to understand how society can move toward greater fairness, inclusion and peace.

Literature Review

a. Introduction to Social Inequality

Social inequality is a condition where people in society do not receive equal access to resources, opportunities and rights. It exists when some groups have better living conditions, education, healthcare, employment and legal protection, while others face poverty, discrimination and exclusion. Social inequality is not only about income differences but also about power, status and the ability to participate fully in society. According to many sociologists, inequality is created by social structures and systems that favor certain groups over others. In modern society, inequality can be seen in both developed and developing countries. Poor families often struggle to access quality education and healthcare, while wealthier families enjoy better opportunities and security. This creates a cycle where poverty continues from one generation to another. Social inequality also affects women, minority groups, people with disabilities and rural communities who may experience discrimination and limited opportunities in daily life. Researchers explain that social inequality weakens social unity and creates division among people. When society becomes unfair, trust in institutions decreases and people may feel hopeless and disconnected. This can lead to social unrest, conflict and crime. Therefore, understanding social inequality is important for building peaceful and stable societies.

b. The Concept of Social Justice

Social justice means fairness, equality and respect for human rights in society. It is based on the idea that every person deserves equal opportunities and should be treated with dignity regardless of their background. Social justice focuses on reducing unfair treatment caused by poverty, discrimination, gender inequality and social exclusion. It promotes equal access to education, healthcare, employment and legal protection for all people. Many scholars explain that social justice is not only about giving equal rights but also about removing barriers that prevent people from enjoying those rights. For example, if education is free but poor children cannot afford transportation or school materials, true equality does not exist. Social justice aims to create systems that support real fairness, not just legal promises. Governments play an important role in promoting social justice through public policies and welfare programs. Laws that protect workers, women, children and minority groups help reduce inequality and strengthen social harmony. Social justice also requires public awareness, responsible leadership and

active participation from communities. Without social justice, peace and development become difficult to achieve.

Causes of Social Inequality

There are many causes of social inequality and they often work together to create long-term disadvantages for certain groups. One major cause is poverty. Poor families usually have limited access to education, healthcare and employment opportunities. This makes it difficult for them to improve their living conditions and poverty continues across generations. Another important cause is unequal access to education. Education is one of the strongest tools for social mobility, but many children in rural or low-income areas do not receive quality education. Lack of trained teachers, poor school facilities and financial difficulties prevent many students from reaching higher education and better jobs. Gender discrimination is also a serious cause of inequality. In many societies, women face lower wages, fewer job opportunities and limited decision-making power. They may also experience violence, harassment and unequal legal protection. This prevents women from fully participating in social and economic development. Ethnic discrimination, caste systems, disability discrimination and religious inequality also create unfair treatment. Some groups are excluded from opportunities simply because of their identity. In addition, corruption, weak governance and poor public policies increase inequality by allowing resources and power to remain in the hands of a small group of people.

Effects of Social Inequality on Society

Social inequality has serious effects on both individuals and society as a whole. One major effect is social exclusion. People who are poor or discriminated against may feel that they do not belong in society. They may lose confidence, feel powerless and experience mental stress and emotional suffering. Inequality also increases crime and violence. When people cannot meet their basic needs or feel that society is unfair, frustration and anger can grow. This may lead to theft, drug abuse, domestic violence and other forms of crime. Areas with high poverty often experience higher levels of social conflict and insecurity. Another effect is weak trust in government and institutions. When people believe that laws and services only protect the rich or powerful, they lose confidence in public systems. This creates political instability and social unrest. Citizens may stop participating in community development because they feel their voices do not matter. Economic development is also affected by inequality. A country cannot grow successfully if a large part of its population is left behind. When people do not have access to education and employment, their talents are wasted. This

reduces productivity and slows national progress. Therefore, reducing inequality is necessary for sustainable development.

1 Role of Education in Reducing Inequality

Education is one of the most powerful tools for reducing social inequality and promoting social justice. It gives people knowledge, skills and opportunities to improve their lives. Through education, individuals can find better jobs, make informed decisions and participate actively in society. Researchers show that equal access to education helps break the cycle of poverty. Children from poor families who receive quality education have a better chance of achieving economic stability. Education also promotes critical thinking, awareness of rights and respect for diversity, which strengthens peaceful coexistence. However, educational inequality remains a major problem. Rural schools often lack facilities, qualified teachers and technology. Poor students may drop out because of financial pressure or family responsibilities. Girls in some communities may also face cultural barriers to continuing education. Governments must invest in free and quality education for all. Scholarships, school meal programs, transportation support and digital learning opportunities can help disadvantaged students. Inclusive education policies are necessary to ensure that no one is left behind.

Government Policies and Social Justice

Government policies have a direct impact on social inequality and social justice. Fair laws and strong public services can reduce inequality, while poor governance and corruption can make it worse. Public policies related to education, healthcare, housing, labor rights and social welfare are especially important. For example, free healthcare services help poor families receive medical treatment without financial burden. Minimum wage laws and worker protections improve fairness in employment. Social welfare programs such as housing support and food assistance help vulnerable populations meet basic needs. Legal protection is also important. Strong laws against discrimination, domestic violence, child labor and workplace exploitation create safer and fairer communities. Governments must ensure that justice systems are accessible to everyone, not only to wealthy people. Researchers also highlight the importance of transparency and accountability in governance. Corruption often causes resources to be unfairly distributed, increasing inequality. Responsible leadership and citizen participation help ensure that policies serve the public interest and support social justice.

Building a Fair and Inclusive Society

A fair and inclusive society is one where all people feel valued, respected and protected. Inclusion means that everyone has the chance to participate in social, economic and political life regardless of their background. This requires cooperation between governments, communities, institutions and individuals. Community awareness is important in reducing prejudice and discrimination. People must learn to respect diversity and support equal rights for others. Media, schools and religious institutions can help promote values of tolerance, kindness and social responsibility. Employment opportunities must also be fair and accessible. Equal pay, safe workplaces and support for disabled persons and minority groups help create inclusive economic growth. Women's empowerment is especially important for achieving social justice and long-term development. Building an inclusive society is not a short-term process. It requires continuous effort, strong leadership and public commitment. When fairness becomes a shared value, societies become more peaceful, stable and successful. The literature shows that social inequality and social justice are deeply connected. Inequality creates barriers that prevent people from enjoying equal rights and opportunities, while social justice provides solutions that promote fairness, dignity and inclusion. Poverty, discrimination, unequal education and weak governance are major causes of inequality and they lead to serious social and economic problems. Education, strong public policies, legal protection and community participation are key strategies for reducing inequality and building a fair society. A peaceful and developed nation cannot exist without social justice. Therefore, understanding and addressing social inequality is necessary for creating a better future where every person has the chance to live with dignity, equality and hope.

Methodology

This research uses a qualitative research approach to understand the relationship between social inequality and social justice and to identify practical ways to build a fair and inclusive society. A qualitative method is suitable for this study because it helps explain social issues in depth by focusing on human experiences, social conditions and the meaning behind social problems rather than only using numbers and statistics. Since social inequality is a complex issue connected to people's daily lives, beliefs, opportunities and treatment in society, qualitative research provides a better understanding of these realities. The research is mainly based on secondary data collection. Secondary data means information that has already been collected and published by other researchers, institutions and organizations. This includes books, academic journals, research articles, government reports, policy documents, newspaper articles and reports published by international organizations related to human rights,

social development and public policy. These sources help provide strong background knowledge and reliable information for analyzing the causes and effects of social inequality and the role of social justice in solving these issues.

The study also uses a descriptive research design. Descriptive research helps explain the current situation of social inequality in society and how it affects different social groups such as low-income families, women, minority communities, rural populations and people with disabilities. This design allows the researcher to describe real social conditions clearly and examine how unequal access to education, healthcare, employment and legal protection creates injustice and social exclusion. The sampling method used in this study is purposive sampling. This means the researcher selects information sources that are directly related to the research topic and useful for answering the research questions. For example, studies that focus on poverty, discrimination, gender inequality, education gaps, healthcare access and social justice policies are selected because they provide relevant evidence for understanding the issue. The purpose is not to collect a large amount of random information but to choose high-quality and meaningful sources that support the research objectives. Data analysis is carried out using thematic analysis. In this method, the researcher carefully reads and examines the collected information to identify common themes, patterns and repeated ideas. Themes such as poverty, unequal education, gender discrimination, weak governance, social exclusion and policy solutions are grouped and analyzed to understand how they are connected to social inequality and social justice. This helps the researcher organize information clearly and present findings in a meaningful and logical way.

Ethical considerations are also important in this research. Since the study uses published secondary data, proper attention is given to honesty, accuracy and correct citation of all sources. The researcher avoids plagiarism by giving credit to original authors and ensures that the information used is trustworthy and relevant. Respect for academic integrity is necessary to maintain the quality and reliability of the research.This methodology helps the study achieve its main goal of understanding how social inequality affects social justice and what actions can be taken to create a more equal and inclusive society. By using qualitative analysis and reliable secondary sources, the research provides a strong foundation for discussing social problems and recommending practical solutions for long-term peace, fairness and sustainable social development.

Data Analysis

The data analysis for this research is conducted using thematic analysis, which is a qualitative method used to identify, examine and interpret patterns and themes within collected information. Since this study focuses on social inequality and social justice, thematic analysis is suitable because it helps the researcher understand social problems in a deeper and more meaningful way rather than only depending on numerical data. It allows the study to explore experiences, social conditions and institutional challenges that affect fairness and equality in society. The first step in data analysis is collecting and reviewing secondary data from books, academic journals, research articles, government publications, policy reports and reliable online sources related to social inequality and social justice. These sources provide important information about poverty, education gaps, healthcare inequality, unemployment, gender discrimination and unequal legal protection. The researcher carefully reads these materials to gain a full understanding of the issue.

The second step is organizing the collected information into major themes and sub-themes. For example, poverty and unemployment are grouped under economic inequality, while unequal access to education and healthcare are grouped under social service inequality. Gender discrimination, minority exclusion and disability discrimination are grouped under social exclusion and human rights issues. This thematic grouping helps the researcher identify how different forms of inequality are connected and how they influence social justice. The third step involves interpreting the findings by comparing different studies and identifying common ideas, repeated problems and practical solutions suggested by previous researchers. This helps the researcher understand the relationship between inequality and justice more clearly. It also helps identify which government policies and social programs are effective in reducing inequality and promoting fairness. Finally, the analyzed data is presented in a clear and descriptive form to support the research objectives. The findings are explained using simple language while maintaining academic quality, allowing readers to understand the real impact of social inequality on individuals and society. Through this process, the research provides strong evidence on how social justice can be strengthened and how a fair and inclusive society can be built for long-term peace and development.

Ethical Considerations

Ethical considerations are an important part of this research because they help maintain honesty, fairness and academic integrity throughout the study. Since this research focuses on social inequality and social justice, it is necessary to handle information

responsibly and respectfully. Ethical research ensures that the study is trustworthy, reliable and conducted in a professional manner without causing harm or spreading false information. This study mainly uses secondary data, which includes books, academic journals, research articles, government reports, policy documents and reliable online sources. Because the information is taken from already published materials, the researcher must give proper credit to the original authors and institutions. All sources are clearly cited and referenced to avoid plagiarism. Plagiarism means using someone else's ideas or words without acknowledgment and avoiding it is essential for maintaining academic honesty.

The researcher also ensures that all information used in the study comes from trustworthy and relevant sources. False, biased, or unsupported information can weaken the quality of the research and create misunderstanding. Therefore, only reliable academic and professional sources are selected for analysis. This helps improve the validity and accuracy of the research findings. Confidentiality and respect are also considered, especially when discussing vulnerable groups such as poor communities, women, minority groups and people with disabilities. The researcher avoids using harmful language, stereotypes, or unfair judgments when describing social problems. The purpose of the study is to understand inequality and support social justice, not to criticize or discriminate against any group of people. Objectivity is another important ethical principle in this research. The researcher must remain neutral and avoid personal bias when analyzing information. Findings should be based on evidence and facts rather than personal opinions or assumptions. This helps ensure that the conclusions are fair, balanced and useful for understanding the real social situation. Overall, ethical considerations help protect the quality and credibility of the research. By following academic honesty, proper citation, reliable source selection, respectful language and objective analysis, the study maintains strong ethical standards and contributes responsibly to the discussion of social inequality and social justice in society.

Significance of the Study

This study is important because social inequality and social justice are major issues that affect the peaceful development of every society. Many people still face unfair treatment, limited opportunities, poverty, discrimination and social exclusion because of differences in income, gender, education, ethnicity, disability and social status. These problems create barriers that prevent individuals from living with dignity and equal rights. Therefore, understanding the relationship between social inequality and social justice is necessary for building a fair and inclusive society. The study helps to identify the main causes of social inequality such as poverty, unemployment, unequal

access to education, healthcare differences, gender discrimination and weak public policies. By understanding these root causes, governments, policymakers and social institutions can create better strategies to reduce inequality and improve social justice. This makes the research useful for decision-makers who are responsible for developing policies related to public welfare and human rights. This research is also significant because it explains how social inequality affects social peace and national development. When people feel excluded or treated unfairly, it can lead to frustration, conflict, crime and mistrust toward institutions. A society cannot achieve long-term peace and stability if justice is not equally available to all citizens. The findings of this study help show why fairness and inclusion are necessary for social harmony and sustainable development. Another important value of this study is its contribution to academic knowledge. It provides useful information for students, researchers and scholars who are interested in sociology, criminology, public policy, human rights and social development. The study can serve as a reference for future research related to inequality, justice and peaceful governance.

The study is also beneficial for communities and individuals because it raises awareness about the importance of equal rights and social responsibility. It encourages people to understand the challenges faced by disadvantaged groups and promotes empathy, respect and inclusion. Social justice is not only the responsibility of governments but also of every citizen who wants to support fairness and equality. Overall, the significance of this study lies in its ability to connect social problems with practical solutions. It helps society understand that reducing inequality is not only an economic issue but also a human rights issue. By promoting equal opportunities, fair treatment and responsible governance, the study supports the creation of a peaceful, just and inclusive society for present and future generations.

Findings of the Study

The findings of this study show that social inequality remains one of the biggest challenges in modern society and has a strong negative impact on social justice, peace and national development. The research found that unequal access to education, healthcare, employment opportunities, housing and legal protection creates serious unfairness among different social groups. People from low-income families, rural communities, minority groups, women and people with disabilities often face more difficulties in improving their lives compared to those with greater economic and social advantages.One major finding is that poverty is one of the strongest causes of social inequality. Poor families often struggle to meet their basic needs such as food, education, healthcare and safe housing. Because of financial limitations, children from poor families may leave school early, which reduces their chances of getting good jobs

in the future. This creates a continuous cycle of poverty that passes from one generation to another. The study found that poverty is not only an economic issue but also a major barrier to social justice and equal opportunity.

Another important finding is that unequal access to education greatly increases social inequality. Education is one of the most powerful tools for personal and social development, but many students in rural and low-income areas do not receive the same quality of education as students in urban or wealthy areas. Lack of school facilities, trained teachers, transportation and financial support creates educational gaps. As a result, many young people are unable to reach higher education or professional employment, which limits their future and increases social division. The study also found that gender discrimination continues to affect social justice in many societies. Women often face unequal pay, fewer leadership opportunities, workplace discrimination and limited legal protection. In some communities, cultural beliefs and traditional practices prevent women from receiving equal education and employment opportunities. This weakens both individual development and national progress because half of the population is not given equal chances to contribute fully.

Healthcare inequality was also identified as a major problem. People living in poor or rural areas often have limited access to hospitals, medicine and qualified healthcare professionals. High medical costs prevent many families from receiving proper treatment. This creates health problems that affect education, employment and overall quality of life. The study found that healthcare inequality increases social injustice because health is a basic human right that should be available to everyone. Weak governance and poor public policies were another major finding. Corruption, unfair distribution of resources and lack of transparency often allow inequality to continue. In some cases, laws and services benefit powerful groups more than ordinary citizens. When people feel that justice systems are unfair or inaccessible, trust in government decreases. This creates frustration, social tension and sometimes conflict. Strong and responsible leadership is necessary to reduce inequality and protect social justice.

The study further found that social inequality directly affects peace and social stability. When people experience exclusion, discrimination and unfair treatment for a long time, they may feel anger, hopelessness and distrust. This can lead to crime, violence, protests and social unrest. A peaceful society cannot exist where large groups of people feel ignored or oppressed. Social justice is therefore essential for preventing conflict and promoting harmony. Another key finding is that government intervention and inclusive public policies can significantly reduce inequality. Free education, affordable healthcare, fair employment opportunities, legal protection and social welfare programs help create a more balanced society. Scholarships, women empowerment

programs, disability support and rural development projects were identified as practical solutions that improve fairness and inclusion. Community awareness and public participation also play an important role in reducing discrimination and supporting equal rights.

Finally, the study found that social justice is not only the responsibility of governments but also of society as a whole. Families, schools, religious institutions, media and communities all have a role in promoting fairness, respect and human dignity. Building a fair and inclusive society requires both policy changes and changes in public attitudes. People must learn to value equality and support the rights of others regardless of social background. Overall, the findings confirm that social inequality and social justice are deeply connected. Reducing inequality requires long-term commitment, strong leadership, equal opportunities and responsible social values. A society that protects fairness and inclusion creates better conditions for peace, development and human well-being. These findings strongly support the need for practical action to build a more just and inclusive future for all people.

Recommendations

Based on the findings of this study, several recommendations can be made to reduce social inequality and strengthen social justice in society. These recommendations focus on improving equal opportunities, protecting human rights and creating a fair and inclusive environment where every person can live with dignity and respect. The first recommendation is to improve equal access to quality education for all people. Education is one of the strongest tools for reducing inequality and breaking the cycle of poverty. Governments should provide free and quality education, especially for children from poor families and rural communities. Scholarships, school meal programs, transportation support and access to digital learning should be strengthened so that students from disadvantaged backgrounds can continue their education without financial barriers. Special attention should also be given to girls and children with disabilities to ensure inclusive learning opportunities. The second recommendation is to strengthen healthcare services and make them affordable for everyone. Healthcare is a basic human right and no person should suffer because they cannot afford medical treatment. Governments should improve hospitals, provide qualified medical staff in rural areas and reduce the cost of essential medicine and treatment. Public health programs should also focus on preventive care, awareness campaigns and equal access to healthcare facilities for vulnerable communities.

Another important recommendation is to create fair employment opportunities and reduce workplace discrimination. Equal pay for equal work, safe working conditions

and fair recruitment systems should be promoted in both public and private sectors. Women, minority groups and people with disabilities should be given equal opportunities in employment and leadership positions. Skill development programs and vocational training should also be expanded to help unemployed youth and low-income individuals improve their future opportunities. The study also recommends stronger government policies and responsible leadership to reduce inequality. Public resources must be distributed fairly and corruption should be strictly controlled. Governments should introduce and enforce laws that protect people from discrimination, exploitation and social exclusion. Transparent governance, accountability and citizen participation are necessary to ensure that public policies serve all people equally, not only powerful groups.

Social welfare programs should also be expanded to support vulnerable populations such as poor families, elderly people, single parents and persons with disabilities. Housing assistance, food support, financial aid and social protection programs help reduce extreme poverty and improve social security. These programs create a stronger safety net for people who are most at risk of exclusion. Community awareness and social responsibility are equally important. Schools, media, religious institutions and community leaders should promote values such as equality, respect, tolerance and inclusion. Public awareness campaigns can help reduce discrimination based on gender, ethnicity, disability, or social class. People must understand that social justice is not only a government responsibility but also a shared duty of all citizens. Finally, future research should continue to study social inequality and social justice in different social and cultural contexts. More research can help identify new challenges and better solutions for promoting fairness and inclusion. Continuous academic attention is necessary because social inequality changes over time and requires updated responses. Reducing social inequality requires strong cooperation between governments, institutions, communities and individuals. Equal access to education, healthcare, employment and justice must be treated as basic rights, not privileges. By following these recommendations, societies can move closer to becoming more peaceful, fair and inclusive for present and future generations.

Limitations of the Study

This study, like all research, has certain limitations that may affect the depth and scope of the findings. Understanding these limitations is important because it helps explain the boundaries of the research and provides direction for future studies. Although the research provides useful information about social inequality and social justice, some challenges were present during the research process. The first limitation is that the study mainly depends on secondary data. The research is based on books, academic

journals, research articles, government reports, policy documents and reliable online sources rather than primary data collected directly from people through interviews or surveys. While secondary data provides strong background information, it may not fully reflect the current personal experiences of individuals who face social inequality in daily life. Direct interaction with affected communities could provide deeper understanding and more practical insights.

The second limitation is the wide scope of the topic. Social inequality and social justice are broad concepts that include many areas such as education, healthcare, employment, gender discrimination, poverty, legal protection and human rights. Because of time and resource limitations, the study could not examine every aspect in full detail. Instead, it focused on the major causes and general effects of inequality. Some specific issues may require separate and more detailed research. Another limitation is that social inequality differs from one country to another and from one community to another. Cultural values, economic systems, political structures and legal frameworks are different in each society. Therefore, some findings and recommendations of this study may not apply equally to all countries or social groups. The research provides a general understanding, but local studies are needed for more specific policy solutions.Limited access to updated data was also a challenge. Some official reports and policy documents may not be fully updated or easily available, especially in developing countries. This can affect the accuracy of information related to current social conditions, poverty levels and public service access. In some cases, the researcher had to depend on previously published studies that may not fully represent recent social changes. Researcher bias can also be considered a possible limitation in qualitative studies. Since the study uses thematic analysis and interpretation of existing information, personal understanding and judgment may influence how data is selected and explained. Although efforts were made to remain objective and use reliable sources, complete removal of subjective interpretation is difficult in social research.

Finally, financial and time constraints limited the ability to conduct a larger and more detailed investigation. A broader study involving field research, interviews and direct community observation would require more resources and time. Because of these limitations, the study mainly focuses on theoretical understanding and policy discussion rather than large-scale field evidence. Despite these limitations, the study still provides valuable knowledge about the relationship between social inequality and social justice. It offers useful insights into the causes, effects and possible solutions for building a fair and inclusive society. These limitations do not reduce the importance of the research but instead highlight areas where future studies can provide stronger and more detailed findings.

Conclusion

Social inequality remains one of the most serious challenges faced by modern societies. Unequal access to education, healthcare, employment, housing, legal protection and social opportunities creates unfair treatment among different social groups and weakens the foundation of peace and development. People who belong to poor families, rural communities, minority groups, women and people with disabilities often experience discrimination, exclusion and limited opportunities, which prevent them from living with dignity and equal rights. This study shows that poverty, unemployment, unequal education, gender discrimination, weak governance, corruption and poor public policies are major causes of social inequality. These problems not only affect individual lives but also create wider social issues such as crime, violence, frustration and mistrust toward governments and institutions. When justice is not equally available to everyone, social harmony becomes weak and long-term national development becomes difficult to achieve. Social justice plays a very important role in solving these problems by promoting fairness, equality, human rights and inclusion. A socially just society ensures that every person has equal opportunities to improve their life regardless of their background, social class, or economic condition. It supports equal access to quality education, affordable healthcare, fair employment and strong legal protection for all citizens.The study also highlights that building a fair and inclusive society requires strong government policies, responsible leadership and active participation from communities and individuals. Public resources must be distributed fairly, discrimination must be reduced and vulnerable groups must be protected through effective social welfare programs and legal systems. At the same time, society must develop values of respect, tolerance and shared responsibility to support peaceful coexistence. Reducing social inequality is essential for achieving social justice and creating a peaceful and developed society. Equality should not be treated as a privilege for a few people but as a basic right for everyone. A nation can only grow successfully when all people are given the chance to participate, contribute and live with dignity. Therefore, promoting social justice and reducing inequality must remain a priority for governments, institutions and society as a whole in order to build a better future for present and future generations.

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Chapter 46: Legal Mechanisms for Digital Governance: A Comparative Approach in the Asian Context and Implications for Vietnam

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Abstract: Digital governance has emerged as one of the central strategic priorities of states in the era of digital transformation. Far from being a straightforward administrative upgrade, the transition from traditional public administration to data-driven and technologically mediated governance both transforms the organisation and operation of the state apparatus and generates fundamentally new demands on the legal order. How legal mechanisms for digital governance are constructed is therefore not merely a question of legislative technique; it reflects each country's choices regarding the model of the state, the degree of protection afforded to citizens' fundamental rights, and its development orientation in a context of deepening international integration. This chapter analyses and compares the legal mechanisms governing digital governance in four representative Asian jurisdictions, namely the Republic of Korea, Singapore, Japan, and India, each of which has adopted distinct yet instructive approaches to constructing legal frameworks for e-government, public data management, online public service delivery, information security in state operations, and the protection of citizens' rights in the digital environment. Through the methodology of comparative law, the chapter systematically identifies convergences and divergences in legislative approaches, institutional design, and implementation practices, recognising common regional trends and reference models of practical value. The comparative analysis reveals that the most successful digital governance frameworks in Asia share three structural characteristics: mandatory inter-agency data-sharing obligations backed by enforceable legal norms; independent supervisory institutions vested with jurisdiction over public-sector data processing; and deliberate legislative strategies for ensuring equal citizen access to digital public services. With respect to Vietnam, the national digital transformation process is being accelerated by the Law on Data 2024, the Law on Personal Data Protection 2025, and the Law on Digital Transformation 2025, which together establish an initial but incomplete legal framework. Alongside these achievements, Vietnam's legal system contains significant structural lacunae concerning inter-agency coordination mechanisms, unified standards for public data management, mechanisms for supervising state agency conduct in the digital environment, and ensuring equal citizen access to digital public services.

Drawing on the comparative analysis and an assessment of the domestic legal landscape, the chapter proposes concrete orientations for completing the legal mechanism for digital governance in Vietnam, aimed at building an effective, transparent, and accountable system that safeguards citizens' rights and meets the requirements of building the Socialist Rule-of-Law State in its new stage of development.

Keywords: *digital governance; legal mechanisms; comparative Asian law; e-government; Law on Data 2024; digital transformation; Socialist Rule-of-Law State.*

1. Introduction

Few transformations in the history of public administration have altered the relationship between the state and its citizens as profoundly as the current wave of digitalisation. Where the great administrative revolutions of the nineteenth century were driven by industrialisation and the construction of the modern bureaucratic apparatus, today's transformation is propelled by ubiquitous digital technology, exponential growth in data generation, and the progressive integration of artificial intelligence into governmental decision-making. For legal scholarship, the challenge this shift presents is not merely descriptive but normative and institutional: what legal mechanisms must states construct to ensure that the exercise of public power through digital means remains consistent with the rule of law, respects fundamental rights, and genuinely serves the public interest (Zuboff, 2019)?

Digital governance, understood as the comprehensive system through which the state organises power, formulates and implements policy, delivers public services, and discharges accountability obligations by operating digital systems and data infrastructures, has steadily moved from the margins of administrative law into its very centre. The shift to digital governance does not merely add new tools to an existing administrative apparatus; it alters the underlying logic and architecture of state power in ways that existing legal doctrines were not designed to address. Consider the following: a citizen's entitlement to social welfare benefits may now depend on the output of an algorithmic system operating without human review; administrative decisions may be taken on the basis of data profiles assembled by state agencies without the citizen's knowledge; and for those without reliable internet access, the entirety of the relationship with the state may simply become inaccessible. Each situation raises legal questions for which existing doctrine offers at best an imperfect answer (Fountain, 2001).

Part of the difficulty is structural. Digital governance sits at the intersection of several legal domains that have historically developed in relative isolation: administrative law governing the conduct of public authorities; information and communications technology law regulating the infrastructure of digital society; data

protection law safeguarding individuals against the misuse of personal information; cybersecurity law addressing threats to digital systems; and constitutional law protecting fundamental rights against state encroachment. Rather than fitting neatly within any one of these domains, digital governance implicates all of them at once, demanding a degree of legal integration and systemic thinking that most national legal systems are still developing (Hood & Margetts, 2007).

Comparative legal analysis is well positioned to contribute here. Examining how different jurisdictions have constructed legal frameworks for digital governance makes it possible to identify structural features of successful frameworks, institutional arrangements that enable effective enforcement, legislative techniques that have succeeded or failed in practice, and the value choices that underlie different approaches. Such analysis is particularly valuable for jurisdictions still developing their own frameworks, since comparative experience provides empirically grounded material rather than purely theoretical prescription (Zweigert & Kötz, 1998).

Four Asian jurisdictions are examined in this chapter: the Republic of Korea, Singapore, Japan, and India. Selection was guided by three criteria. Each jurisdiction has achieved measurable results in some dimension of digital governance, providing substantive material for comparison. Each also represents a meaningfully distinct approach to state organisation and legal design, ranging from Korea's model of comprehensive legislative codification to Singapore's institutional governance approach, from Japan's experience of delayed but ultimately decisive reform to India's infrastructure-first strategy pursued under conditions of profound inequality. Finally, all four operate within the Asian regional context, making them more directly relevant comparators for Vietnam than European or North American models that differ substantially in legal tradition, state capacity, and socioeconomic conditions (United Nations Department of Economic and Social Affairs [UN DESA], 2024).

The research methodology is that of comparative law, drawing on doctrinal analysis of primary legal texts in each jurisdiction, supplemented by secondary literature, policy documents, and institutional reports. Analysis proceeds across three levels: legal norms, examining what the law formally prescribes; institutional design, examining how enforcement and supervisory mechanisms are structured; and implementation, examining the extent to which formal frameworks have produced measurable outcomes in practice (Gil-Garcia et al., 2018).

For Vietnam, the analysis draws on the framework established by Law on Data No. 60/2024/QH15, the Law on Personal Data Protection 2025, the Law on Digital Transformation 2025, and the broader corpus of Vietnamese public law, including the Constitution of 2013 and the Law on Electronic Transactions 2023. Vietnam's current

framework is assessed against the comparative baseline established in preceding sections, with the aim of identifying concrete legislative and institutional orientations grounded in regional experience (Ministry of Information and Communications [MIC], 2021).

The chapter proceeds as follows. Section 2 establishes the theoretical framework, defining digital governance and the concept of legal mechanism. Section 3 conducts the comparative analysis of the four jurisdictions. Section 4 assesses Vietnam's current legal framework. Section 5 synthesises comparative findings. Section 6 develops implications for Vietnam with concrete orientations. Section 7 draws conclusions.

2. Theoretical Framework: Digital Governance, Legal Mechanisms, and Comparative Methodology

2.1 Defining Digital Governance: Beyond E-Government

Since the term "e-government" entered administrative vocabulary in the late 1990s, its meaning has been substantially revised. Early definitions were largely technological in character, treating e-government as the use of information and communications technology to deliver government services and information more efficiently. While that framing was useful in its time, it is now regarded as too narrow to capture what digital technology has done to the exercise of public power. The computational capacity now available to governments, the volume and sensitivity of data they collect, and the degree to which algorithmic systems have been embedded in consequential administrative decisions have all outgrown a definition rooted in service delivery efficiency (Meijer & Bekkers, 2015).

A more adequate conception, adopted throughout this chapter, distinguishes four dimensions of digital governance. Service delivery refers to the use of digital platforms to provide public services to citizens, businesses, and other entities. Administration encompasses the use of digital systems and data analytics to improve governmental processes, covering decision-making, resource allocation, and inter-agency coordination. Regulation comprises the use of digital tools to regulate social activities that bear on public interests, including automated compliance monitoring and real-time data collection by state bodies. Accountability refers to the use of digital systems to enhance transparency, enable public participation, and give citizens practical means to assert their rights against the state (Castells, 2004).

Running through all four dimensions is the centrality of data. Digital governance is, at its core, governance through data: the collection, storage, processing, analysis, and exchange of information about citizens, territory, economic activity, and

public services constitutes the operational substrate of the digital state. Data is not a neutral technical resource; it is a medium of power. A state with comprehensive data about its citizens possesses a capacity for surveillance, influence, and administrative control that has no clear historical precedent. At the same time, responsibly governed public data can deliver genuine social benefits, enabling more targeted services, better-calibrated policy, and faster emergency responses. Any workable legal framework for digital governance must take this ambivalence seriously, facilitating beneficial uses while providing meaningful constraints against misuse (OECD, 2020).

It is worth maintaining a clear distinction between digital governance and the broader phenomenon of digital transformation. Digital transformation is a general process of societal change associated with technological adoption across all sectors. Digital governance is the specific form this transformation takes within the state apparatus. The two processes are related but governed by different logics: digital governance must observe constitutional and legal constraints on the exercise of public power that do not apply in the same way to private actors undergoing similar technological change (Bertot et al., 2010).

2.2 Legal Mechanisms: Conceptual and Analytical Framework

In Vietnamese legal theory, and in parallel traditions within continental European jurisprudence, the concept of "legal mechanism" (co che phap ly) denotes the operational system through which legal norms are translated into actual social behaviour. More precisely, it refers to the ensemble of legal rules, institutional arrangements, and procedural processes that together constitute a functional system for regulating a given field of social relations. Three constitutive elements can be identified. Substantive legal norms define rights, obligations, and standards of conduct. Institutional arrangements designate the bodies responsible for applying and enforcing those norms. Procedural mechanisms specify the processes through which norms are applied, disputes resolved, and accountability realised (Wirtz et al., 2019).

Effectiveness depends on the coherence and synchrony of all three elements. Clear and comprehensive substantive norms paired with weak enforcement institutions will produce aspirational law that does not change behaviour. Capable institutions operating under poorly designed substantive norms will generate inconsistent outcomes and undermine legal certainty. Even well-designed norms with capable institutions may fail if procedural mechanisms are not practically accessible to those whose rights are at stake. Assessments of legal mechanisms for digital governance must therefore proceed simultaneously across all three dimensions rather than focusing exclusively on legislative text (OECD, 2022).

Digital governance imposes a particularly demanding version of this challenge, because the legal mechanism must satisfy two requirements that are in some tension. On one side, the framework must provide legal certainty: clear, predictable rules that enable state agencies to know their obligations and citizens to know their rights. This requirement is especially acute in digital governance, because ambiguity is amplified by scale and speed. A legal rule governing a thousand manual administrative decisions per year becomes, in a digital system, one governing millions of automated decisions per hour; any imprecision propagates at the same scale. On the other side, the framework must remain sufficiently flexible to adapt to rapid technological change, since overly rigid technical specifications embedded in primary legislation quickly become obsolete as technology evolves (Janssen & Helbig, 2018).

One legislative response to this tension that has emerged across several jurisdictions is the principles-based or outcome-based approach: rather than specifying technical requirements in primary legislation, the law articulates technology-neutral principles and required outcomes, leaving the specification of technical means to subordinate legislation or technical standards that can be updated more readily. This technique offers genuine advantages but also costs: it places a greater interpretive burden on regulatory institutions, demands higher technical expertise in those institutions, and may reduce predictability for entities seeking to comply (Levi-Faur, 2012).

2.3 Comparative Methodology and Scope

The comparative methodology employed here draws on the functional approach in comparative law, which focuses on the social function that legal institutions perform rather than on their formal classification within domestic legal systems (Zweigert & Kötz, 1998). This is particularly appropriate for digital governance law, because identical or closely analogous governance functions may be served by institutions classified very differently across jurisdictions. What Korean law calls the "electronic government system," Singapore law addresses primarily through whole-of-government administrative policy, and Japanese law treats under the "digital society formation" framework may all serve comparable regulatory functions even where formal categorisation diverges substantially.

The four comparator jurisdictions were selected to represent meaningfully distinct institutional models within the Asian regional context. Korea exemplifies comprehensive legislative codification with strong central coordination. Singapore exemplifies a high-capacity administrative state combining selective statutory codification with binding administrative standards. Japan provides an instance of delayed but ultimately thoroughgoing reform catalysed by an acute exogenous shock.

India provides an instance of developing-country digital governance pursued under conditions of structural inequality and democratic pluralism. These models are sufficiently distinct to generate genuine comparative insight while remaining sufficiently proximate in their regional context to allow lessons to be drawn for Vietnam (Lee & Kim, 2022).

The scope of comparison is limited to legal mechanisms directly concerned with state digital governance, specifically the regulation of the state's own digital activities and their relationship to citizens' rights. The broader field of technology regulation, including competition law applied to digital platforms, intellectual property in the digital economy, or private sector artificial intelligence regulation, falls outside this chapter's scope, though its intersections with public digital governance are noted where relevant.

3. Comparative Analysis of Digital Governance Legal Mechanisms in Selected Asian Jurisdictions

3.1 The Republic of Korea: Comprehensive Codification and Integrated Institutional Architecture

3.1.1 Legislative Evolution and Strategic Framework

Korea's sustained performance at or near the top of the United Nations E-Government Survey rankings is not incidental. It reflects a legislative and institutional strategy pursued with remarkable consistency across successive administrations since the late 1990s, beginning with the Kim Dae-jung government's "Cyber Korea 21" initiative and continuing through subsequent decades. What distinguishes the Korean approach is not merely the scope of its ambitions but the systematic manner in which those ambitions have been translated into a coherent, enforceable legal architecture (National Information Society Agency [NIA], 2023).

The foundation of that architecture is the Framework Act on Electronic Government (jeonja jeongbu beop), enacted in 2001 and most recently revised in 2023. Rather than confining itself to technical provisions on electronic service deployment, the statute establishes foundational principles governing the entire enterprise, covering convenience for citizens, administrative efficiency, security of information systems, and interoperability of electronic systems. Of particular structural importance is the Act's mandate for an "e-government standard framework," which requires common technical standards across all public sector information systems. This requirement has prevented the proliferation of incompatible proprietary systems that has plagued digital governance in many other jurisdictions. The 2023 revision added specific provisions on artificial intelligence-assisted administrative decision-making, including an obligation

on agencies to disclose AI involvement in decisions affecting citizens and to maintain human review mechanisms upon request (Electronic Government Act, 2001/2023).

A second legislative pillar is the Personal Information Protection Act of 2011, substantially restructured in 2020 and further amended in 2023. Before the 2020 revision, data protection in Korea was fragmented across sector-specific statutes, creating regulatory gaps and enabling agencies to seek the most permissive interpretation available. The revision consolidated that patchwork into a single comprehensive framework applicable to both public and private entities and established a unified regulatory authority, the Personal Information Protection Commission (PIPC), independent of line ministries. Alignment with international standards, particularly the European Union's General Data Protection Regulation, was pursued deliberately but without wholesale replication. The 2023 amendments extended the framework to address AI and automated decision-making, including the right of data subjects to object to decisions taken solely through automated processing and to request a human reviewer (Personal Information Protection Act, 2011/2023).

3.1.2 The Data-Based Administration Framework and the Once-Only Principle

Among Korea's legislative contributions to digital governance, the Act on Promotion of Data-Based Administration of 2020 stands out as regionally significant. Unlike earlier instruments that merely permitted agencies to use data, this statute imposes a positive legal obligation to conduct administrative decision-making and policy formulation on a data-analytical basis. It requires agencies to prepare data management plans, creates a government-wide data registry enabling cross-agency data discovery, and establishes open government data as the default rather than the exception, subject to defined legal exemptions. In doing so, the Act reframes data not as an internal resource belonging to individual agencies but as a shared governmental asset managed in the public interest (Act on Promotion of Data-Based Administration, 2020).

Closely related is what practitioners and scholars have termed the "once-only principle," codified as a legal obligation in the Electronic Government Act. Under this principle, a citizen who provides any item of information to a public agency has no further obligation to provide that same information to any other agency; instead, agencies are legally required to share the information among themselves to meet their respective administrative needs. Practical results have been substantial: in 2022 the Korean government reported that implementation through the Government for Citizens portal eliminated more than 900 categories of document previously required of citizens and reduced the average time needed to complete routine administrative procedures by over sixty per cent (NIA, 2023). Studies commissioned by the National Information Society Agency further estimated annual savings equivalent to approximately 0.5 per

cent of GDP when the value of citizens' time, transportation costs, and administrative processing overhead are aggregated, with gains accruing disproportionately to lower-income groups and residents of rural areas who had faced the heaviest burdens of in-person interaction with the state (NIA, 2023).

3.1.3 Institutional Architecture and Accountability Mechanisms

Korean digital governance is institutionally structured around a clear division of roles. The Ministry of Interior and Safety coordinates digital governance policy under the Electronic Government Act framework. The National Information Society Agency provides technical support, research, and capacity-building. The PIPC functions as an independent regulatory authority with quasi-judicial powers to investigate complaints, impose administrative sanctions, and issue binding interpretations applicable to both public and private entities (Personal Information Protection Act, 2011/2023).

Before 2020, data protection oversight was divided among multiple bodies, a fragmentation that allowed agencies to manoeuvre between regulators and argue that their activities fell under whichever interpretation was most permissive. Consolidating regulatory authority in a single independent commission has substantially reduced these avoidance strategies, though critics note that the PIPC's sanctioning powers remain weaker than those of equivalent European authorities and that its oversight of national security-related processing activities is still limited (Personal Information Protection Commission [PIPC], 2023).

Korea's Government for Citizens portal (Jeongbu24) illustrates the systemic benefits of unified technical infrastructure. By 2023, the portal offered access to more than 5,500 government services through a single authentication system. Citizens can also view their own records held by different agencies, providing a degree of transparency in governmental data use that has no direct equivalent in most other Asian jurisdictions. This transparency function, distinct from service delivery efficiency, represents an underappreciated governance benefit of well-designed digital public infrastructure (Electronic Government Act, 2001/2023).

3.2 Singapore: High-Capacity Administrative State and Differentiated Legal Regimes

3.2.1 The Whole-of-Government Architecture

Singapore's approach to digital governance reflects distinctive institutional characteristics: a small, highly educated population; a civil service with a well-established reputation for technical competence; a tradition of pragmatic, outcome-oriented public management; and a political context in which governmental

authority is strong and broadly accepted. These conditions have enabled Singapore to pursue a form of digital governance more ambitious in its integration than most larger democratic states, though that same integration also concentrates governmental authority over data and digital infrastructure in ways that raise non-trivial questions about rights protection (Lim, 2018).

At the institutional centre of Singapore's digital governance framework is the Government Technology Agency, known as GovTech, established under the Government Technology Agency Act 2016. GovTech is more than a technical body. It is the strategic authority responsible for designing, deploying, and operating the entire digital government infrastructure, including shared platforms, common data architectures, and whole-of-government cybersecurity systems. Its "whole-of-government" mandate requires all public sector information systems to be built on, or made compatible with, GovTech-defined technical standards. This requirement has largely prevented the agency silo problem. GovTech also operates the Singpass platform, which serves as the universal digital identity infrastructure for citizen-state interactions across all government agencies (Government Technology Agency Act, 2016).

The Smart Nation initiative, launched in 2014, provides the overarching policy framework. It is notable for explicitly embracing data from the urban environment, including sensor networks, camera systems, and mobility data, as inputs to improved public services and governance. Two technical pillars support the initiative: the National Digital Identity system, which enables authenticated citizen interactions with the state, and the Singapore Government Data Architecture, which provides the framework for managing and sharing government data across agencies. Together these systems create a degree of data integration in Singapore's public sector that few jurisdictions have matched (Smart Nation and Digital Government Office, 2023).

3.2.2 Legislative Framework: Hard Law and Soft Law in the Public Sector

Singapore's legislative approach is characterised by a deliberate combination of hard law and soft law. Hard law takes the form of formal statutory provisions with legal force. Soft law takes the form of administrative guidelines, technical standards, and circulars that bind the public sector by virtue of hierarchical authority rather than formal legislative enactment. This combination is pragmatic: detailed technical requirements embedded in primary legislation are slow and cumbersome to amend, yet mere aspirational guidance without legal backing is insufficient to drive consistent compliance. The resulting layered architecture allows technical standards to evolve with technology while maintaining a stable legal foundation (Yeo & Tan, 2021).

The most significant statutory instrument governing public sector data is the Public Sector (Governance) Act 2018. Before its enactment, public sector data protection rested primarily on administrative guidelines without statutory force. The Act creates a statutory duty of care for public officers handling government data, establishes specific criminal offences for the unauthorised disclosure or misuse of agency-held data, and provides statutory backing for the Government Instruction Manual on data security. Notably, criminal liability under the Act extends to negligent data mishandling and not only to deliberate misconduct, a provision that creates strong compliance incentives without requiring evidence of malicious intent (Public Sector (Governance) Act, 2018).

The Personal Data Protection Act 2012, as substantially amended in 2020, governs private sector data protection and, through incorporation by reference into governmental guidelines, also informs public sector standards. The 2020 amendments introduced mandatory data breach notification, significantly increased financial penalties, added data portability rights, and created a new accountability framework requiring designated data protection officers and management programmes. The interplay between the PDPA framework and the Public Sector (Governance) Act creates a layered regime in which public entities face both the baseline PDPA requirements and the additional, more stringent obligations of the public sector statute (Personal Data Protection Act, 2012/2020).

Singapore supplements this statutory framework with a suite of binding technical standards issued by GovTech as administrative directives applicable to all government agencies. The Government Data Classification Framework, the Government Cybersecurity Standards, and the Trusted Data Sharing Framework each specify detailed compliance requirements. Their effectiveness depends on a civil service compliance culture reinforced by performance management systems that evaluate senior officials against digital governance indicators, a mode of enforcement that functions well in Singapore's specific institutional setting but would likely yield weaker results in jurisdictions with different administrative cultures (Tan, 2019).

3.2.3 Rights Protection and the Limits of the Singapore Model

A credible critique of Singapore's framework is that the emphasis on integration and efficiency creates risks for individual rights that existing legal mechanisms address only partially. There is no independent external body with jurisdiction over public sector data processing equivalent to Korea's PIPC. Citizens who believe their data has been mishandled by a government agency must address their complaint to the relevant ministry or seek judicial review, neither of which offers a readily accessible or specialised remedy (Personal Data Protection Commission [PDPC], 2023).

Singapore has sought to address this through the Personal Data Protection Commission, but the Commission's jurisdiction under the PDPA does not extend to public sector processing. That exclusion is mitigated in practice by strong institutional compliance culture and the significant reputational consequences that serious data failures would carry in Singapore's particular political context. Nevertheless, the gap represents a structural limitation that becomes progressively more consequential as the volume and sensitivity of government data processing increases with the expansion of Smart Nation programmes. It also stands in contrast to the Korean approach, which resolved the equivalent structural tension by creating an independent regulatory authority with jurisdiction over both sectors (PDPC, 2023).

3.3 Japan: From Institutional Inertia to Decisive Structural Reform

3.3.1 The Problem of Administrative Sectionalism

Japan's experience with digital governance is instructive partly by virtue of its failures. For much of the first two decades of the twenty-first century, Japan lagged significantly behind its regional peers in the digitalisation of public administration, a gap widely regarded as paradoxical given the country's technological sophistication and the competence of its civil service. United Nations E-Government Survey rankings placed Japan well below Korea and Singapore year after year, and in several dimensions of digital service delivery Japan's performance was not markedly superior to countries at substantially lower levels of economic development (UN DESA, 2024).

The explanation, widely acknowledged in official Japanese government analysis, lies primarily in bureaucratic sectionalism (tate-wari gyosei), the deeply embedded tendency of each ministry and agency to operate as a self-contained administrative unit, resistant to coordination and disinclined to share data or systems with other parts of the government. Each ministry developed its own information systems, its own data standards, and its own digital interfaces with citizens. Citizens were consequently required to interact with dozens of separate agency portals, submit the same information repeatedly to different bodies, and navigate authentication systems that were mutually incompatible. No single authority existed with sufficient standing to compel ministerial cooperation, and multiple coordination committees established for that purpose produced limited results (Mishima, 2021).

The legal framework reinforced rather than corrected these structural tendencies. The Law on Utilisation of Information and Communications Technology in Administrative Procedures, enacted in 2002, established the legal basis for electronic administrative procedures but left individual ministries wide discretion over whether and how to implement digital services. The My Number Act of 2013 established a unique identification number for all residents of Japan, a measure with transformative

potential. In practice, uptake was slow for years. By 2020, fewer than twenty per cent of eligible persons held a My Number Card, partly because the legal framework created limited incentive to obtain one and partly because the system's practical utility was constrained by the fragmented agency infrastructure the Act did not address (My Number Act, 2013).

3.3.2 The COVID-19 Shock and the Digital Agency Reform

The COVID-19 pandemic exposed Japan's digital governance deficit in politically consequential terms. The government's April 2020 decision to distribute emergency cash payments to all residents revealed that online application through the My Number system could not handle demand volumes and was incompatible with the data systems of many municipalities. Local governments, formally responsible for processing applications, were inundated with paper forms. A substantial proportion of eligible recipients waited months for payments. The contrast with Korea's response was striking: using existing social insurance data systems, Korea delivered payments to over ninety per cent of eligible households within weeks. The episode generated sustained political pressure for reform of a kind that years of expert recommendation had not produced (Digital Agency, 2022).

The institutional response was the most significant structural reform in Japanese public administration in a generation. In September 2021, the Digital Agency was established reporting directly to the Prime Minister, with cross-cutting authority to coordinate digital transformation across all ministries and agencies. Its institutional design addressed the sectionalism problem directly: unlike earlier coordinating bodies housed within specific ministries and constrained by their host ministry's interests, the Digital Agency was positioned at Cabinet Office level and granted statutory authority under the Digital Agency Establishment Act to issue binding directions to other ministries on matters within its mandate (Digital Agency Establishment Act, 2021).

Accompanying legislation included the Basic Act on the Formation of a Digital Society, which articulated a national vision for digital transformation and established legally binding principles covering user-centricity, equity of access, trust and security, and interoperability. A legislative package also required systematic review and amendment of all laws and regulations mandating physical documents, personal seals (hanko), in-person attendance, or other analogue requirements. This last measure addressed a problem that had frustrated piecemeal digitalisation efforts for two decades: the sheer number of statutory provisions explicitly requiring analogue procedures, which could only be resolved through systematic legislative reform rather than agency-by-agency amendment (Basic Act on the Formation of a Digital Society, 2021).

Three lessons from Japan's experience are worth emphasising. Institutional design matters at least as much as legislative design: the My Number framework failed not primarily as a matter of drafting but as a matter of coordination. Exogenous shocks can open political windows for reforms identified as necessary for years but blocked by bureaucratic resistance. And legislative reform, while necessary, is not sufficient without complementary cultural change in the civil service, since rules and institutions only work when those responsible for implementing them have internalised the values the rules are designed to serve (Digital Agency, 2022).

3.4 India: Digital Governance at Scale Under Conditions of Inequality

3.4.1 Structural Context and the Inclusion Imperative

India illustrates challenges in digital governance that are qualitatively different from those facing high-income states, and in doing so it provides perhaps the most instructive comparator for jurisdictions at earlier stages of development. With a population exceeding 1.4 billion, vast disparities in economic development and digital access across states and between urban and rural areas, profound linguistic diversity, and a democratic political system characterised by competitive federalism and an active judiciary, India operates under structural constraints that do not arise in the same form in Korea, Singapore, or Japan (Ministry of Electronics and Information Technology [MeitY], 2022).

Among those constraints, the digital divide deserves particular attention. In India, the divide extends well beyond internet access to digital literacy, the availability of interfaces in regional languages, the practical capacity of citizens to navigate complex digital systems, and the reliability of power supply and hardware. A legal framework that does not explicitly address these dimensions will, in practice, exclude large populations from access to public services as those services migrate to digital platforms. More broadly, whether digital transformation concentrates benefits among already advantaged groups or distributes them more widely depends precisely on whether legal frameworks impose meaningful obligations of accessibility and inclusion (Gurumurthy & Bharthur, 2018).

3.4.2 The India Stack and Its Legal Foundations

India's most distinctive contribution to global digital governance is the India Stack, a layered digital public infrastructure architecture built on three foundational elements: a biometric identity system (Aadhaar), a digital authentication and signature framework (eSign), and a real-time payment system (the Unified Payments Interface, UPI). The India Stack reflects a deliberate policy choice to build digital governance on open-source, interoperable public infrastructure rather than proprietary systems

controlled by private entities or individual government agencies. Aadhaar has enrolled over 1.3 billion individuals; UPI processed more than 9 billion transactions per month as of 2023, making India's real-time payment infrastructure the largest in the world by transaction volume (Puttaswamy v. Union of India, 2017).

The legal history of the India Stack is more complicated than its technological record might suggest. Aadhaar was initially deployed on the basis of executive orders, without dedicated statutory authority, and was challenged before the Supreme Court of India. In Justice K.S. Puttaswamy (Retd.) v. Union of India (2017), a nine-judge constitutional bench unanimously held that the right to privacy is a fundamental right protected under Articles 14, 19, and 21 of the Constitution. The Court upheld the Aadhaar Act 2016, enacted belatedly to provide statutory grounding for the biometric identity system, but struck down several of its provisions as disproportionate, notably requirements for Aadhaar authentication as a condition of access to private sector services, on the ground that such requirements exceeded what was necessary for the legitimate governmental objectives pursued (Puttaswamy v. Union of India, 2017).

The Digital Personal Data Protection Act 2023 represents India's first dedicated standalone data protection statute. It establishes rights for data principals covering access, correction, erasure, grievance redress, and nomination of a representative, and imposes obligations on data fiduciaries including purpose limitation, data minimisation, and security safeguards. A Data Protection Board of India is established as the adjudicatory body for complaints. Significant concerns have been raised about the breadth of the exemptions available to the government: public bodies may exempt themselves from any or all provisions of the Act on grounds of national security, prevention of public order offences, and other broadly defined interests, a provision that critics argue may undermine the Act's protective framework in practice (Digital Personal Data Protection Act, 2023).

3.4.3 Implementation Challenges and the Federal Dimension

Implementation of national digital governance frameworks in India is significantly complicated by its federal constitutional architecture. Under the Seventh Schedule of the Constitution, jurisdiction over matters central to digital governance, including local government, public order, public health, and land records, is divided between the Union and the States, with many of the most practically important services for citizens falling within state jurisdiction. A national digital governance framework cannot be imposed uniformly from the centre; it must be implemented through twenty-eight state governments and eight union territories, each with its own administrative structures, technical capacity, and political priorities (Gurumurthy & Bharthur, 2018).

The consequence is uneven implementation. Some states, notably Andhra Pradesh and Telangana, have developed real-time governance dashboards and data-driven service delivery systems that rank among the most sophisticated in the developing world. Others have made more limited progress, and the gap between leading and laggard states is substantial. India's response, combining financial incentives through the Digital India initiative with minimum legislative standards and competitive benchmarking, offers a model for managing federal diversity in digital governance that may have relevance for Vietnam's own subnational variation challenges (Misra & Bhatt, 2022).

The Common Service Centres programme deserves particular mention as an institutional innovation in digital inclusion. With over five hundred thousand assisted-access points deployed across rural India, the programme trains local entrepreneurs to help citizens complete digital transactions with the government. It extends the effective reach of e-government services to populations that cannot access them independently and provides a practical model of how physical assistance infrastructure can complement digital infrastructure in a context of uneven connectivity (Misra & Bhatt, 2022).

4. Vietnam's Legal Framework for Digital Governance: Evolution, Achievements, and Structural Lacunae

4.1 Historical Development of the Digital Governance Legal Framework

Vietnam's engagement with the legal dimensions of digital governance has unfolded over roughly two decades of incremental legislative development punctuated by periods of more ambitious reform. The Law on E-Transactions of 2005 established the basic legal validity of electronic signatures and electronic documents, providing the foundational infrastructure for digitally mediated legal relationships between the state and citizens. The Law on Information Technology of 2006 followed, addressing the development of the information technology sector, the management of the internet, and the rights and obligations of actors in cyberspace. These early instruments were significant as enabling legislation but lacked the institutional framework and enforcement mechanisms that effective digital governance requires (MIC, 2021).

A more systematic phase of development began around 2015. Government Resolution No. 36a/NQ-CP of 2015 set ambitious targets for the digitalisation of public services and established a performance evaluation framework for comparing progress across ministries and provinces. The National E-Government Development Plan 2016-2020 provided a more detailed roadmap. Both instruments were important in shifting administrative attention and creating accountability for progress, but they

remained at the level of aspirational policy targets rather than enforceable legal standards. Without stronger institutional and legal infrastructure, ambitious targets produced limited measurable results, a pattern consistent with Japan's experience in the same period (MIC, 2020).

Institutional development gathered pace with the establishment of the National Committee on E-Government in 2018, chaired by the Prime Minister and composed of ministers and provincial leaders. The Committee provided a high-level coordination mechanism that had previously been absent. Its subsequent elevation to the National Committee on Digital Transformation in 2020 reflected the broadening of the reform programme's scope and the accelerating urgency of digital governance issues following the pandemic. The Ministry of Information and Communications has served throughout this period as the primary regulatory authority for digital governance, progressively assuming a more active role in driving both legal reform and technical standard-setting (MIC, 2020).

4.2 Current Legislative Architecture

Vietnam's current digital governance legal framework comprises three statutes enacted between 2023 and 2025, together with implementing decrees, circulars, and technical standards of varying binding force. The Law on Electronic Transactions (revised), Law No. 20/2023/QH15, substantially updated the 2005 framework by incorporating modern provisions on electronic authentication, digital identity, and electronic contracts adapted to contemporary technical conditions. The revised law moved Vietnam's electronic transactions regime closer to standards articulated in the UNCITRAL Model Law on Electronic Commerce and removed several legal barriers that had previously complicated the full digitalisation of administrative procedures (Law on Electronic Transactions, 2023).

Law on Data No. 60/2024/QH15, enacted in November 2024, is the most ambitious legislative achievement of Vietnam's digital governance reform programme. For the first time, it establishes a comprehensive legal framework governing the entire data lifecycle, covering creation, collection, storage, processing, sharing, and destruction, applicable to both public and private entities. A legal category of "core data" (du lieu cot loi) is created for data held by state agencies of particular importance for national governance and public service delivery, with specific management obligations attached. The Law creates a framework for a National Data System conceived as integrated infrastructure for governmental data storage and sharing, and establishes a National Data Committee as the central coordinating body. In effect, it reconceptualises public sector data from internal agency property to a shared governmental resource managed in the public interest (Law on Data, 2024).

The Law on Personal Data Protection 2025 addresses a structural weakness in Vietnam's data protection regime. Before its enactment, personal data protection rested primarily on Decree No. 13/2023/ND-CP, which provided regulatory detail but lacked the authority of a statute. The 2025 Law elevates personal data protection to the level of primary legislation, establishing a comprehensive rights framework for data subjects covering access, rectification, erasure, portability, and objection to processing, and imposing corresponding obligations on data controllers and processors. The Ministry of Public Security is designated the primary regulatory authority for personal data protection, with provisions specifically addressing compliance obligations for state agencies in their capacity as data controllers (Law on Digital Transformation, 2025).

The Law on Digital Transformation 2025 provides the overarching statutory framework for Vietnam's digital transformation process. For digital governance specifically, it creates obligations on state agencies to develop digital transformation plans and deliver digital public services at defined quality levels, and includes general provisions on accessibility for citizens in disadvantaged circumstances. Together with the Law on Data 2024 and the Law on Personal Data Protection 2025, it completes the basic legislative architecture that Vietnam has been constructing over the past decade. That the basic architecture now exists is an achievement that should not be understated. What remains, however, is the question of whether this architecture is functionally complete and operationally effective (Law on Digital Transformation, 2025).

4.3 Institutional Framework for Digital Governance

Vietnam's institutional framework for digital governance distributes responsibility across several central agencies without a single body possessing the integrated authority of Korea's NIA, Singapore's GovTech, or Japan's Digital Agency. The Ministry of Information and Communications holds the broadest mandate, covering the digital economy and digital society, telecommunications and internet services, and e-government coordination. The Ministry of Public Security is responsible for cybersecurity and personal data protection. The Government Office coordinates the National E-Government Portal and national online public services. The Ministry of Science and Technology handles standards development and electronic signature regulation (MIC, 2020).

This distribution has clear advantages in terms of specialisation, but it generates coordination challenges that become acute precisely in the areas where effective digital governance most depends on inter-agency collaboration. The National Committee on Digital Transformation, under the Prime Minister's chairmanship, provides high-level policy direction and monitoring, but it is not equipped for operational coordination of technical implementation. Without an agency with

GovTech-style authority over shared technical infrastructure, the development of common platforms, interoperability frameworks, and unified authentication systems proceeds more slowly and less coherently than the framework's stated objectives would require (MIC, 2021).

Subnational implementation presents additional challenges. Vietnam's sixty-three provinces and municipalities vary considerably in technical capacity, financial resources, and administrative capability for digital transformation. The gap between leading provinces such as Hanoi, Ho Chi Minh City, and Da Nang and provinces in remote highland regions is reflected in digital transformation performance indices published by the Ministry of Information and Communications. The legal framework currently lacks adequate mechanisms for ensuring minimum digital public service standards across all provinces or for providing meaningful technical and financial support to subnational governments with limited independent capacity (MIC, 2020).

4.4 Structural Legal Lacunae: A Systematic Analysis

Examined against the comparative baseline established in the preceding section, four structural lacunae in Vietnam's legal framework for digital governance emerge as particularly consequential. These are not incidental imperfections in an otherwise complete framework but structural absences that compromise the operational effectiveness of the entire digital governance legal mechanism.

The most consequential lacuna is the absence of an enforceable inter-agency data-sharing framework. The Law on Data 2024 articulates general principles of data sharing and creates the normative foundation for a National Data System, but it does not impose specifically enforceable obligations on individual state agencies to share defined categories of data with other agencies within defined time limits. In practice, inter-agency data sharing continues to depend on bilateral agreements and personal initiative rather than on legal entitlements backed by meaningful sanctions for non-compliance. Citizens must continue to submit documents the state already possesses, and agencies cannot access information held by colleagues in other ministries when processing citizen applications, generating inefficiency and undermining public confidence in e-government reform (Law on Data, 2024).

A second lacuna is the absence of unified technical standards with genuine binding effect and compliance monitoring across all state agencies. The Ministry of Information and Communications has issued technical standards frameworks, including Interoperability Framework for E-Government (LGSP) standards and the National Open Data Standard, but adoption by line ministries and provincial agencies remains uneven. Technical standards issued as administrative circulars are formally

binding, but their enforcement is practically difficult without a body possessing both technical expertise and institutional authority to audit compliance and impose consequences for failure. The result is a public sector IT landscape that is technically fragmented, with many agencies' information systems unable to interoperate with one another despite nominal compliance with applicable standards (MIC, 2020).

A third lacuna is the absence of a supervisory institution for digital governance with genuine independence from the agencies it supervises and clear jurisdiction over public sector data processing. Under the current arrangement, the Ministry of Public Security, one of the largest data controllers in the Vietnamese public sector, supervises compliance with personal data protection obligations. This structural conflict of interest cannot be resolved by administrative instruction. Its resolution requires either an independent external supervisory body or clearly delineated internal accountability mechanisms combined with external judicial and parliamentary review mechanisms that are practically accessible to affected citizens, neither of which is currently well-developed in the Vietnamese legal system for this domain (Law on Digital Transformation, 2025).

A fourth lacuna concerns the legal guarantee of equal access to digital public services. Vietnam's digital divide, while narrowing in urban areas, remains substantial in rural and highland regions, among ethnic minority communities, among elderly citizens, and among persons with disabilities. The Law on Digital Transformation 2025 includes general provisions on digital inclusion, but these do not create specifically enforceable obligations requiring state agencies to maintain alternative non-digital access channels, provide targeted digital literacy support, or design services in formats accessible to persons with disabilities. Without such specific legal obligations, there is a genuine risk that the digitalisation of public services will effectively reduce access for the country's most vulnerable citizens, an outcome inconsistent with both the constitutional principle of equality and Vietnam's international human rights commitments (Law on Digital Transformation, 2025).

5. Comparative Findings: Convergences, Divergences, and a Typology of Asian Digital Governance Models

5.1 Structural Convergences Across Jurisdictions

Despite the significant differences in institutional design, legislative technique, and specific legal content across the four jurisdictions, comparative analysis reveals structural convergences that appear to reflect broadly shared lessons drawn from practical experience with digital governance implementation. These convergences are not the product of deliberate policy coordination; rather, they represent independent

conclusions that jurisdictions have reached through similar encounters with the limitations of earlier, less comprehensive approaches.

Perhaps the most consistent convergence is the shift from enabling legislation to mandatory obligation frameworks. All four jurisdictions began with legal frameworks that primarily enabled digital governance, removing legal barriers to electronic transactions and creating the permissibility of digital services, rather than requiring them. Over time, each has moved toward frameworks that impose positive mandatory obligations on state agencies: to share data, to implement services, to meet data protection standards, to report breaches. This shift reflects practical experience with a predictable institutional dynamic: in the absence of mandatory obligations, agencies' organisational interests and institutional inertia tend to prevent adoption of practices that require effort, generate coordination costs, or distribute benefits unevenly across the bureaucratic landscape (Lee & Kim, 2022).

A second convergence is the growing role of independent or quasi-independent regulatory institutions in oversight of governmental digital activities. Korea's PIPC, Singapore's PDPC (despite its public sector limitations), India's Data Protection Board, and Japan's Digital Agency each represent attempts to create institutional actors at least partially insulated from the political and bureaucratic pressures that tend to weaken internal self-regulation. The pattern is consistent: digital governance requires dedicated institutional capacity for both coordination and oversight, and that capacity cannot be adequately provided by traditional line ministry structures operating within established hierarchies (Lee & Kim, 2022).

A third convergence is the recognition of public sector data as a shared resource subject to principles of open access, responsible management, and accountability rather than as the proprietary information of individual agencies. Korea's Act on Promotion of Data-Based Administration, Singapore's Government Data Architecture, Japan's Digital Society Formation Basic Act, and India's National Data Governance Framework all reflect this reorientation. Its legal implications are significant: shifting the default from secrecy to openness, from agency control to inter-agency sharing, and from passive data holding to active data governance with defined responsibilities and accountability mechanisms (Act on Promotion of Data-Based Administration, 2020).

A fourth convergence is increasing legislative attention to citizens' rights in their interactions with digital governance systems. All four jurisdictions are, at different stages and with different degrees of comprehensiveness, developing legal provisions addressing the right to access government-held personal data, challenge automated decisions, seek redress for data misuse, and obtain access to digital public

services on equal terms. This reflects a growing recognition that digitalisation creates new categories of potential rights violations, specifically those arising from algorithmic opacity, discriminatory data use, and digital exclusion, that existing legal frameworks were not designed to address and that require specific legislative responses (OECD, 2022).

5.2 Persistent Divergences and Their Constitutional Foundations

Alongside the convergences, persistent divergences are apparent that reflect deeper differences in constitutional tradition, political philosophy, and the balance of values that each jurisdiction strikes between competing goods. These are not merely technical variations but express fundamentally different understandings of the relationship between the state and the individual in the digital era.

The most fundamental divergence is between frameworks that prioritise collective welfare objectives and those that treat individual rights as primary constraints on governmental action. Singapore's framework implicitly prioritises collective efficiency, security, and the capacity of government to manage the city-state in the common interest. This reflects a coherent political philosophy, though a contestable one. India's framework, shaped by the Puttaswamy judgment, treats the constitutional right to privacy as a structural constraint on governmental data collection and use even where the governmental purpose is entirely legitimate. Korea's framework attempts to balance these considerations through comprehensive data protection legislation of general application enforced by an independent authority. These are not merely technical differences; they reflect distinct constitutional settlements about the permissible reach of state power in the digital environment (PIPC, 2023).

A related divergence concerns the role of courts in supervising digital governance. In India, the Supreme Court has been an active participant in shaping the legal framework, striking down provisions of the Aadhaar Act and articulating proportionality standards that constrain governmental data collection. In Singapore, judicial review of governmental digital activities is formally available but rarely exercised in practice, a pattern reflecting both civil service compliance culture and broader constitutional context. In Korea and Japan, the primary accountability mechanisms are regulatory oversight and parliamentary scrutiny rather than litigation. These differences carry substantial practical implications for the enforceability of citizens' rights (Digital Personal Data Protection Act, 2023).

5.3 A Typology of Asian Digital Governance Legal Models

Drawing on the comparative analysis, four ideal-typical models can be identified. The Comprehensive Codification Model, exemplified by Korea, is characterised by a complete body of primary legislation covering all aspects of digital governance; a strong central coordinating institution; a unified data protection regime applicable to both sectors; mandatory data-sharing obligations with enforcement mechanisms; and an independent regulatory authority with cross-sector jurisdiction. The Institutional Governance Model, exemplified by Singapore, features selective primary legislation supplemented by binding administrative standards; a single powerful implementation agency exercising whole-of-government authority; a differentiated legal regime distinguishing public from private sector; and strong civil service accountability in lieu of independent external oversight. The Reform Shock Model, exemplified by Japan, features delayed reform followed by rapid and comprehensive restructuring; a new cross-cutting coordinating institution; systematic legislative removal of analogue barriers; and emphasis on interoperability and shared infrastructure. The Infrastructure-First Model, exemplified by India, features early deployment of public digital infrastructure followed by progressive legislative consolidation; an explicit legislative focus on social inclusion and digital access; a complex federal legal architecture accommodating substantial subnational variation; and strong judicial review of governmental digital activities.

Each model reflects specific institutional conditions that constrain its transferability. Korea's model requires legislative capacity and sustained political commitment that not every system can sustain. Singapore's depends on a civil service culture that is genuinely distinctive to that city-state. Japan's experience illustrates both the costs of prolonged delay and the conditions under which dramatic reform becomes possible. India's approach is most relevant to jurisdictions at earlier stages of digital development operating under conditions of inequality. For Vietnam, the Comprehensive Codification Model and the Infrastructure-First Model together provide the most practically relevant reference framework.

6. Implications for Vietnam: Legislative and Institutional Orientations for Completing the Legal Mechanism for Digital Governance

6.1 Enacting a Mandatory Inter-Agency Data-Sharing Framework

Comparative experience points clearly to the enactment of a mandatory, enforceable inter-agency data-sharing framework as Vietnam's most urgent legislative priority. The Law on Data 2024 establishes important principles and creates a normative foundation for the National Data System, but it does not impose specifically enforceable obligations on individual state agencies to share defined categories of data with other agencies within defined time limits. The practical result is that data sharing

continues to depend on bilateral agreements and personal initiative rather than on legal entitlements, a situation fundamentally inconsistent with the stated policy objective of integrated digital government.

An appropriate legislative response would amend the Law on Data 2024 or enact a detailed implementing decree with statutory force that: designates specific categories of mandatory sharing data, comprising data held by state agencies to which other agencies are legally entitled to access for defined official purposes; establishes time limits within which sharing requests must be fulfilled, with a default limit of no more than three working days for routine requests; creates an accessible dispute resolution mechanism for inter-agency disagreements over sharing obligations, with a designated adjudicatory authority; provides administrative sanctions for non-compliance sufficient to overcome bureaucratic resistance; and requires each agency to maintain a public registry of the data it holds and the conditions under which sharing applies. Korea's Act on Promotion of Data-Based Administration 2020 and its implementing regulations provide the most directly applicable template for this framework's design.

The once-only principle should be codified in Vietnamese law as a legally enforceable obligation with defined implementation timelines rather than remaining a policy objective. Korea's quantified experience is instructive: full implementation reduced the average time required for routine administrative procedures by fifty to seventy per cent and eliminated over 900 categories of document previously required of citizens. For Vietnam, where reduction of administrative burden is a stated governmental priority and where citizens in rural areas continue to incur significant time and travel costs to comply with administrative requirements, operationalising the once-only principle through enforceable legal obligations would have measurable benefits. Achieving it will require investment in a government-wide data catalogue, inter-agency application programming interfaces enabling secure real-time access, and common data standards, all of which should be made mandatory through specific provisions in the legislative framework with defined timelines and designated oversight.

6.2 Establishing an Independent Digital Governance Supervisory Authority

Comparative analysis supports with some consistency the conclusion that a supervisory authority with genuine independence from the agencies it supervises is both functionally necessary and practically achievable. Vietnam's current arrangement, in which the Ministry of Public Security supervises personal data protection compliance while itself being among the largest data controllers in the public sector,

creates a structural conflict of interest that cannot be resolved by administrative instruction or goodwill. What is required is an institutional solution.

In Vietnam's constitutional context, full independence of the European type is not compatible with the principle of unified state management. However, meaningful operational independence within the framework of governmental authority is both constitutionally permissible and practically necessary. A workable model might be a National Committee on Data Governance and Digital Rights, positioned under the Government but governed collegially, with membership drawn from relevant ministries, independent technical experts appointed through a process insulated from political interference, and representatives of the National Assembly's relevant committees. Operational autonomy in supervisory and adjudicatory functions, with decisions subject to judicial review rather than ministerial override, would distinguish it from existing inter-ministerial committees, which function primarily as policy coordination bodies. Korea's PIPC provides the most directly relevant institutional reference, particularly its governance structure and the breadth of its cross-sector jurisdiction.

The jurisdiction of such a Committee should extend to: receiving and investigating complaints from data subjects against public and private sector entities; conducting proactive audits of public sector data processing activities, especially large-scale or sensitive processing; issuing binding interpretations of applicable legal standards with general applicability; imposing administrative sanctions graduated by severity and compliance history; and monitoring implementation of the once-only principle and the mandatory data-sharing framework. All decisions should be published and accessible, building over time a body of interpretive guidance that contributes to legal certainty in the digital governance domain.

6.3 Codifying Universal Access Obligations for Digital Public Services

The risk that digitalisation of public services will exclude those who lack means or capability to use them is not hypothetical. Vietnam's digital divide, while narrowing, remains significant across geographic, demographic, and socioeconomic lines. General provisions in the Law on Digital Transformation 2025 address digital inclusion at a level of abstraction that does not translate into specifically enforceable obligations, leaving citizens in highland areas, ethnic minority communities, elderly persons, and those with disabilities without adequate legal protection against effective exclusion from public services.

Three specific enforceable obligations would address this gap. A channel neutrality obligation would require state agencies to maintain equivalent non-digital access channels for any digital public service until defined, measurable thresholds of

digital inclusion are achieved in the relevant territory or demographic group. Thresholds should be based on periodic national digital inclusion surveys and subject to triennial review by a designated body. A digital accessibility obligation would require all digital public services to comply with technical accessibility standards ensuring usability by persons with visual, auditory, motor, or cognitive disabilities, and to offer interface options in minority languages where populations are of significant size. A digital assistance obligation would require that, in localities where inclusion thresholds have not been met, state agencies ensure citizens who cannot use digital services independently have access to trained assistants who can help them complete digital transactions with the state.

Vietnam's commune-level People's Committees and commune-level cultural facilities provide a natural institutional base through which assisted digital access services could be delivered, provided that legal obligations, staffing support, and technical equipment are put in place. A commune-level digital assistant programme, drawing broadly on India's Common Service Centres experience but adapted to Vietnam's institutional context, could substantially extend effective reach to currently excluded populations. The legislative framework establishing such a programme should specify the agencies responsible for funding and supervision, minimum qualifications for digital assistants, the scope of services they may assist with, data protection requirements applicable to assisted transactions, and evaluation mechanisms for monitoring coverage and quality.

6.4 Developing Unified Technical and Legal Standards with Effective Compliance Monitoring

Technical fragmentation in Vietnam's public sector information systems, with agencies unable to interoperate despite nominal compliance with applicable standards, is a problem that cannot be resolved by publishing additional standards. What is missing is not the standard but the enforcement of it. The Law on Data 2024 and associated regulations should be supplemented by provisions establishing: a compulsory technical compliance certification process for all public sector information systems handling data subject to sharing obligations; a public procurement condition requiring all new government IT systems to demonstrate compliance with applicable interoperability standards as a condition of approval; a body with authority to audit public sector information systems and issue binding remediation orders for non-compliance; and a transparent public register of agency compliance status, updated at least annually.

Technical fragmentation is not a secondary concern. It is the operational barrier that prevents every other element of the digital governance reform programme from

functioning as designed. The once-only principle cannot be implemented without interoperable systems. The National Data System cannot function without common data standards. Digital public service integration is impossible without a shared technical architecture. Resolving fragmentation therefore has priority status not as a stand-alone objective but as a precondition for the effectiveness of the entire legal framework. Singapore's GovTech model, under which technical standards issued by the agency are binding on all government bodies by virtue of its whole-of-government mandate, and Korea's model, under which the e-government standard framework is codified in legislation with monitored compliance, together offer instructive reference points for the institutional design of a Vietnamese equivalent.

6.5 Constitutional Dimensions: Situating Reform Within the Socialist Rule-of-Law Framework

Any discussion of implications for Vietnam that does not situate proposed reforms within the constitutional framework of the Socialist Rule-of-Law State would be incomplete. Resolution No. 27-NQ/TW of the 12th Party Central Committee Plenum in 2022 articulates commitments to strengthening the protection of human rights and citizens' rights, improving legal system quality, and building an effective and accountable government. The digital governance legislative reforms proposed in this chapter serve these commitments directly; they are not technical administrative matters but constitutional imperatives.

From a constitutional standpoint, the digitalisation of public administration constitutes a transformation in the modalities through which state power is exercised rather than any reduction in the legal constraints on that power. The principles of legality (phap che), equality (binh dang), proportionality (tuong xung), and accountability (trach nhiem giai trinh) apply to digital governance with equal force as to traditional administrative action, but their application in the digital context requires specific legal mechanisms that the principles themselves do not automatically generate. Legislatures must translate these constitutional principles into concrete norms adapted to the specific risks of digital governance: the risk of discriminatory or opaque automated decision-making that embeds existing social inequalities; the risk of disproportionate data collection enabled by technical capability that outstrips legal restraint; and the risk that the complexity of digital systems insulates governmental decision-making from effective scrutiny and appeal. Meeting the demands of the Socialist Rule-of-Law State in the digital era requires that legal reform address each of these risks with the same seriousness it brings to the reform of traditional administrative institutions.

7. Conclusion

This chapter has undertaken a systematic comparative analysis of legal mechanisms for digital governance in four representative Asian jurisdictions and applied the lessons of that analysis to an assessment of Vietnam's current legal framework and to the formulation of concrete orientations for its completion.

Three overarching conclusions emerge from the comparative work. First, effective digital governance legal mechanisms share a common structural architecture: mandatory legal norms rather than merely enabling provisions; capable and appropriately independent enforcement institutions; and accessible procedural mechanisms through which citizens can assert their rights. The presence or absence of each element has measurable consequences for practical effectiveness. Japan's experience before and after the 2021 reforms illustrates how technically adequate legislation can fail systematically in the absence of institutions with the authority and mandate to enforce it. Singapore's framework shows that institutional strength can partially compensate for statutory gaps, but also that persistent gaps in external oversight create vulnerabilities as data processing scales.

Second, no universal model exists that can be transplanted across jurisdictions without adaptation. Each of the four models examined reflects specific institutional conditions that are not fully replicable elsewhere. Korea's framework requires the legislative capacity and sustained political commitment its system has maintained across successive administrations. Singapore's depends on a civil service culture that is genuinely distinctive to that city-state. Japan's reform wave illustrates both the costs of prolonged delay and the conditions under which concentrated political will can overcome structural resistance. India's infrastructure-first approach reflects the specific constraints and opportunities of large-scale development under inequality. Drawing lessons from comparative experience is therefore a matter of adaptive learning rather than model selection: identifying the structural principles underlying effective frameworks and designing solutions appropriate to Vietnam's own institutional conditions, constitutional framework, and development stage.

Third, Vietnam's recent legislative achievements are substantial and should be recognised as such. Three major statutes enacted within approximately two years represent real legislative capacity and political commitment. What this chapter has sought to demonstrate, however, is that the basic framework, while complete in outline, remains structurally incomplete in ways that will limit its effectiveness if left unaddressed. The four structural lacunae identified throughout the analysis, namely the absence of an enforceable inter-agency data-sharing framework, an independent supervisory authority, specific universal access obligations, and unified technical standards with genuine compliance monitoring, are not peripheral details. They are the

core elements of any functional digital governance legal mechanism, and their absence means that the broader framework cannot achieve its declared objectives.

For Vietnam, completing the legal mechanism for digital governance is both a practical administrative priority and a constitutional imperative. The rule of law must govern the state in its digital operations as fully as it governs the state in its traditional administrative activities. The legislative and institutional orientations proposed in this chapter are offered as a contribution toward that objective and, more broadly, toward realising in the digital age the commitments to an effective, accountable, and rights-respecting state that lie at the heart of building the Socialist Rule-of-Law State of Vietnam in its new stage of development.

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Chapter 47: Dynamics of Inequality Identity and Sustainability in Modern Society: An Interdisciplinary Perspective

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Abstract

In the contemporary world, inequality, identity, and sustainability have emerged as deeply interconnected issues influencing social, cultural, and environmental realities. Rapid urbanisation, technological development, and globalisation have transformed societies, yet these changes have also intensified disparities related to class, caste, gender, and economic background. This chapter examines the relationship between social inequality, cultural identity, and environmental sustainability through an interdisciplinary perspective within the humanities and social sciences. The study adopts a qualitative approach based on the analysis of academic literature, policy reports, and contemporary social and environmental discussions published between 2015 and 2026. It explores how unequal access to resources and opportunities shapes representation, participation, and vulnerability in modern society. Particular attention is given to the role of identity in influencing social inclusion and cultural representation, while environmental challenges such as pollution and climate change are analysed as issues closely linked to social justice. The chapter further discusses the unequal impact of environmental degradation on vulnerable communities through the case study of air pollution in Delhi. The findings reveal that inequality, identity-based exclusion, and environmental vulnerability are mutually reinforcing and cannot be addressed in isolation. The study contributes to existing scholarship by integrating these dimensions within a single analytical framework and highlighting the need for inclusive governance, equitable policies, and sustainable development strategies. It concludes that interdisciplinary and socially inclusive approaches are essential for building a more just and sustainable future.

Keywords: Social Inequality; Identity; Sustainability; Social Justice; Environmental Justice; Cultural Representation

Introduction

The modern world is changing rapidly in social, cultural, economic, and environmental ways. Globalisation, technological advancement, urbanisation, and industrial growth have transformed the way people live, communicate, and interact with society. While these developments have created opportunities for progress and economic growth, they have also increased social inequality, identity-based discrimination, and environmental challenges. Today, issues related to inequality, identity, and sustainability are deeply interconnected and continue to influence everyday life worldwide.

Social inequality remains one of the biggest challenges in contemporary society. Even though many countries have achieved economic progress, equal access to opportunities and resources is still limited for many people. Factors such as class, caste, gender, religion, ethnicity, and economic background continue to shape people's access to education, healthcare, employment, housing, and political participation (World Bank, 2022). In countries like India, these inequalities are more visible because rapid development exists alongside poverty and social exclusion. Many marginalised communities still struggle with discrimination and limited opportunities, which affects their social mobility and quality of life (Desai & Dubey, 2021).

Economic inequality has become more noticeable in recent years due to the growing gap between the rich and the poor. A small section of society controls a large share of wealth and resources, while many people continue to face unemployment, financial insecurity, and limited access to basic services (Oxfam, 2023). These inequalities are not only economic but also social and cultural. Lack of access to quality education and healthcare often prevents disadvantaged groups from improving their conditions, creating cycles of inequality that continue across generations.

Along with inequality, identity has become an important topic in contemporary discussions. Identity refers to how individuals and communities understand themselves and how they are recognised by society. It is shaped by factors such as culture, caste, religion, ethnicity, language, and gender. Identity influences social experiences, relationships, and opportunities. In many societies, representation through media, literature, cinema, politics, and digital platforms plays a major role in shaping public understanding of different identities.

However, representation is not always fair or inclusive. Certain communities continue to face stereotyping, exclusion, and discrimination. Fraser (2017) explains that social justice is not only about economic equality but also about recognition and representation. When communities are ignored or misrepresented, they often

experience social and political disadvantages. In India, caste and gender identities still influence social status and opportunities despite legal protections promoting equality.

The rise of digital technology and social media has changed the way people express and represent their identities. Online platforms have created spaces for communication, awareness, and activism. Social movements related to gender equality, environmental justice, and minority rights have gained visibility through digital media. At the same time, social media has also increased misinformation, hate speech, and identity-based conflicts. Unequal access to technology has created a digital divide, where economically weaker communities often lack access to digital resources and opportunities.

Environmental sustainability has also become one of the most important concerns of the twenty-first century. Climate change, pollution, deforestation, water scarcity, and environmental degradation are affecting societies around the world. These environmental challenges directly influence human health, livelihoods, food security, and economic stability. According to the Intergovernmental Panel on Climate Change (IPCC, 2021), climate change is one of the most serious global threats today and requires urgent attention.

Importantly, environmental problems do not affect everyone equally. Vulnerable and economically disadvantaged communities are often more exposed to environmental risks while having fewer resources to protect themselves. Poor housing conditions, unsafe workplaces, and limited healthcare increase their vulnerability. In many developing countries, people who depend on agriculture and informal labour are especially affected by environmental changes and climate-related disasters (Sharma et al., 2022). This unequal impact of environmental problems highlights the strong connection between sustainability and social justice.

India provides an important example of these interconnected challenges. Rapid urbanisation and industrial growth have contributed to economic development, but they have also increased environmental pressures. Problems such as air pollution, water scarcity, waste management, and climate-related disasters have become serious concerns. At the same time, social inequalities related to caste, class, and gender continue to influence access to opportunities and resources. Environmental crises often affect socially and economically marginalised communities more severely, showing how inequality and sustainability are closely connected.

The relationship between inequality, identity, and sustainability has become increasingly visible in modern society. Social inequality affects environmental vulnerability, while identity shapes representation, participation, and access to resources. Environmental degradation can further increase existing inequalities by

affecting health, livelihoods, and living conditions. These realities show that social, cultural, and environmental issues cannot be understood separately because they influence one another in many ways.

For this reason, interdisciplinary approaches have become important in understanding contemporary social issues. Different fields such as sociology, political science, environmental studies, economics, and cultural studies provide valuable insights into these challenges. Combining perspectives from different disciplines allows for a broader and deeper understanding of how inequality, identity, and sustainability interact within society.

This chapter aims to examine the interconnected relationship between inequality, identity, and sustainability in modern society through an interdisciplinary perspective. The study explores how social structures, cultural representation, and environmental challenges influence one another. It also highlights the importance of inclusive governance, social justice, and sustainable development in addressing these complex issues. By bringing together social, cultural, and environmental dimensions within a single framework, the chapter contributes to a more comprehensive understanding of contemporary challenges and the need for inclusive and sustainable solutions for the future.

Research Objective

The present study aims to examine the interconnected relationship between inequality, identity, and sustainability in contemporary society through an interdisciplinary perspective. The specific objectives of the study are:

1. To analyse the major forms of social inequality existing in contemporary society.

2. To examine the role of identity and cultural representation in shaping social inclusion and exclusion.

3. To explore the impact of environmental challenges and sustainability issues on vulnerable communities.

5. To evaluate the importance of inclusive governance and social justice in achieving sustainable development.

6. To study how environmental and social challenges disproportionately affect marginalised populations in contemporary society.

Literature Review

Concept of Social Inequality

Social inequality refers to the unequal distribution of resources, opportunities, power, and privileges among individuals and social groups within society. It exists in economic, social, cultural, political, and environmental forms. Factors such as class, caste, gender, religion, ethnicity, and geographical location influence people's access to education, healthcare, employment, and social mobility. Privileged groups generally enjoy greater opportunities, while marginalised communities often experience exclusion and discrimination.

Economic Inequality

Economic inequality refers to unequal distribution of income, wealth, and economic opportunities. Although economic growth has improved living standards globally, its benefits have not been equally shared. According to the World Bank and Oxfam reports, wealth remains concentrated among a small section of society, while millions continue to face poverty and unemployment.

Economic inequality affects access to education, healthcare, nutrition, housing, and employment opportunities. People from low-income backgrounds often experience limited social mobility and remain trapped in cycles of poverty. In India, rapid urbanisation and industrialisation have increased visible inequalities between privileged urban populations and economically weaker rural and informal workers. The COVID-19 pandemic further exposed these inequalities by disproportionately affecting vulnerable populations.

Social and Structural Inequality

Social inequality is deeply connected to social structures such as caste, class, gender, religion, and ethnicity. Pierre Bourdieu explained inequality through economic, social, and cultural capital. Privileged groups often inherit advantages through education, social networks, and cultural knowledge, which helps maintain inequality across generations.

In India, caste continues to influence access to education, employment, housing, and social status despite constitutional protections. Rural and economically weaker communities also face inadequate infrastructure and limited public services. Institutions such as schools, workplaces, and political systems may unintentionally reproduce social hierarchies and structural inequalities.

Gender Inequality

Gender inequality remains a major issue despite progress toward gender equality. Women often face unequal access to education, employment, healthcare, and political participation. Wage gaps, workplace discrimination, and underrepresentation in leadership positions continue in many societies.

In India, gender inequality is influenced by patriarchal traditions, social expectations, caste, and class. Women from rural and marginalised communities experience greater disadvantages. Violence against women, unequal opportunities, and online harassment remain serious concerns. However, feminist movements and digital activism have increased awareness about women's rights and gender justice.

Inequality and Human Development

Amartya Sen's capability approach emphasises that development should focus not only on economic growth but also on expanding human freedoms and opportunities. Access to education, healthcare, employment, and social participation is essential for improving quality of life.

The COVID-19 pandemic highlighted inequalities in healthcare, digital access, and employment opportunities. Economically weaker populations faced greater challenges during lockdowns, showing how inequality affects human development and social inclusion.

Identity and Cultural Representation

Identity refers to how individuals and communities understand themselves and are recognised within society. It is shaped by factors such as caste, ethnicity, religion, gender, language, culture, and nationality. Identity influences social experiences, inclusion, exclusion, and representation.

Understanding Identity

Stuart Hall argued that identity is not fixed but continuously shaped through social and historical experiences. Globalisation and migration have created multicultural societies where multiple identities interact. At the same time, identity-based discrimination related to caste, religion, ethnicity, and gender continues worldwide.

Representation and Recognition

Representation in media, politics, education, and literature shapes public understanding of social groups. Nancy Fraser stated that social justice requires both economic equality and recognition. Marginalised groups that are stereotyped or ignored often face social exclusion and discrimination.

In India, lower caste communities, tribal groups, women, and religious minorities have historically experienced limited representation in mainstream institutions and media.

Digital Media and Identity

Digital media and social networking platforms have transformed identity expression and public participation. Marginalised communities increasingly use online platforms to raise awareness about discrimination, gender equality, and social justice. However, digital spaces also create challenges such as misinformation, hate speech, online harassment, and unequal access to technology.

Intersectionality

Intersectionality explains how different identities such as gender, caste, class, and religion interact to shape experiences of privilege and discrimination. For example, women from lower caste or economically weaker communities may face multiple forms of inequality simultaneously. This perspective helps in understanding the interconnected nature of social inequality.

Sustainability and Environmental Justice

Sustainability refers to meeting present needs without harming the ability of future generations to meet their needs. It involves balancing economic growth, environmental protection, and social well-being. The United Nations Sustainable Development Goals (SDGs) highlight the importance of linking poverty reduction, social equality, and environmental sustainability.

Climate Change and Environmental Challenges

Climate change is one of the most serious global challenges today. Rising temperatures, floods, droughts, pollution, and biodiversity loss affect ecosystems, public health, agriculture, and livelihoods. Rapid industrialisation and urbanisation have increased environmental degradation and resource depletion.

Environmental Justice and Inequality

Environmental justice focuses on the unequal exposure of vulnerable communities to environmental risks. Poor and marginalised populations often face higher levels of pollution and environmental hazards while having fewer resources to protect themselves.

Julian Agyeman introduced the concept of "just sustainability," which combines environmental protection with social justice. In India, poorer urban communities and informal workers are more vulnerable to pollution, water scarcity, and poor waste management.

Sustainability and Governance

Environmental changes directly affect livelihoods, especially among farming and resource-dependent communities. Climate-related disasters create economic insecurity and migration. Researchers emphasise that inclusive governance, public participation, and socially equitable policies are necessary for sustainable development. Governments, civil society organisations, and communities must work together to achieve environmental sustainability and social justice.

Methodological Architecture

Research methodology provides the systematic framework through which research is conducted, analysed, and interpreted. It explains the methods, techniques, and procedures used to study a particular topic. The present study examines the relationship between inequality, identity, and sustainability in contemporary society through an interdisciplinary perspective. Since these themes involve social, cultural, political, economic, and environmental dimensions, the study adopts a qualitative and analytical methodology.

The research aims to understand how social inequality affects access to opportunities and resources, how identity shapes inclusion and representation, and how environmental challenges disproportionately affect vulnerable communities. To analyse these interconnected issues, the study combines perspectives from sociology, political science, environmental studies, cultural studies, and development studies.

Research Approach

The study follows a qualitative research approach. Qualitative research focuses on understanding social realities, experiences, meanings, and institutional structures rather than numerical measurement. This approach is suitable because issues such as inequality, exclusion, identity, and environmental justice require interpretative analysis.

The qualitative method helps examine how different communities experience inequality and environmental challenges differently. It also allows analysis of how economic, political, and cultural systems shape social inclusion, representation, and sustainability. Since the study is interdisciplinary, qualitative research provides flexibility to combine ideas from multiple academic disciplines.

Research Design

The research adopts a descriptive and analytical design. The descriptive aspect explains important concepts such as social inequality, identity, sustainability, environmental justice, and representation in contemporary society. It describes how inequality influences access to education, healthcare, employment, housing, and technology.

The analytical aspect focuses on the interconnected relationship between inequality, identity, and sustainability. The study examines how social inequality increases environmental vulnerability, how identity affects participation and representation, and how environmental degradation intensifies existing social and economic disparities.

Overview of Research Methodology

Research Component	Description
Research Approach	Qualitative Research
Research Design	Descriptive and Analytical
Nature of Study	Interdisciplinary and Conceptual
Sources of Data	Secondary Data
Data Collection Method	Literature Review and Document Analysis
Data Sources	Books, Journals, Reports, Policy Documents
Method of Analysis	Thematic Analysis

Research Component	Description
Time Period Covered	2015–2026
Case Study Used	Air Pollution Inequality in Delhi
Main Themes	Inequality, Identity, Sustainability, Environmental Justice

Nature of the Study

The study is qualitative, conceptual, descriptive, analytical, and interdisciplinary in nature. It is conceptual because it examines major ideas such as inequality, identity, sustainability, and environmental justice through theoretical perspectives. It is interdisciplinary because it combines insights from sociology, political science, environmental studies, and cultural studies to understand complex social realities.

Sources of Data

The study is entirely based on secondary data. Information was collected from academic books, peer-reviewed journals, reports, policy documents, and online academic databases. Theoretical insights from scholars such as Amartya Sen, Pierre Bourdieu, Nancy Fraser, and Stuart Hall were used to strengthen the conceptual framework.

Reports from organisations such as the United Nations, World Bank, IPCC, and Oxfam were also consulted to analyse global trends related to inequality, sustainability, and climate change.

Method of Data Collection

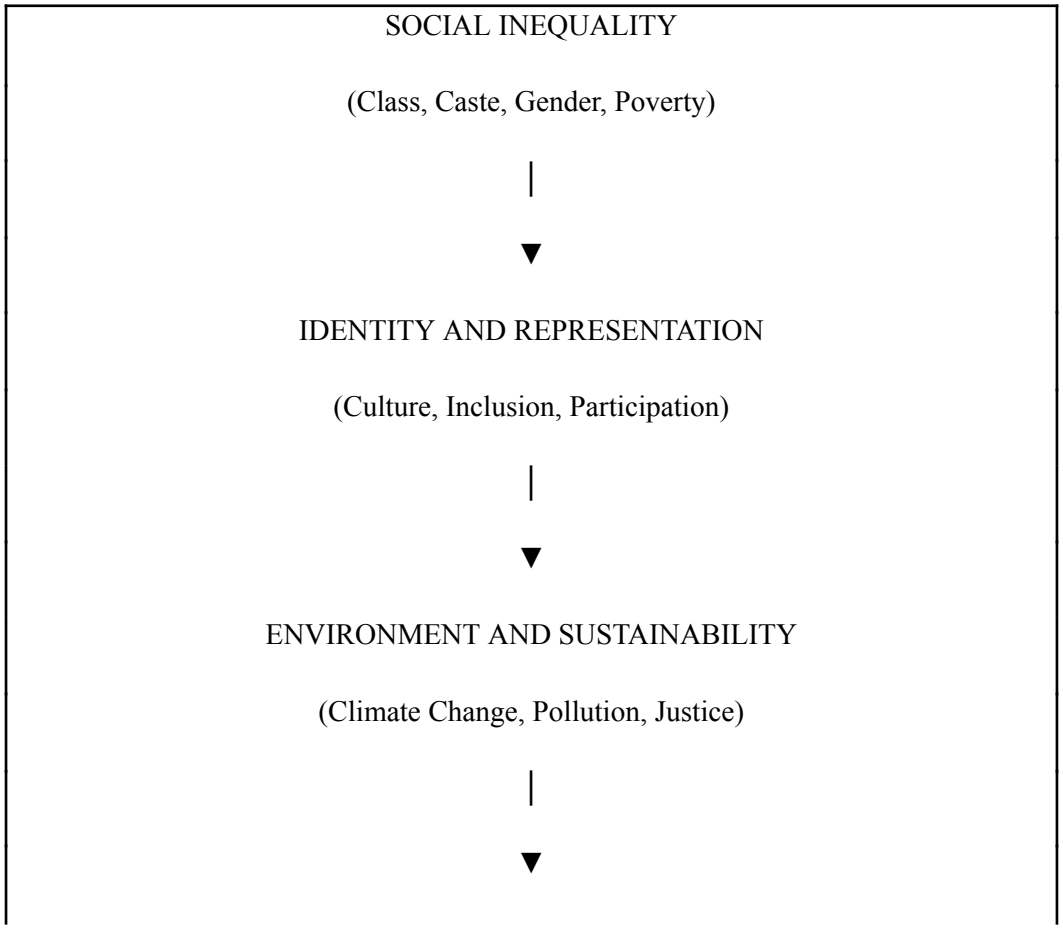
Data was collected through literature review and document analysis. Academic databases such as Google Scholar, JSTOR, Springer, Elsevier, and ResearchGate were used to access relevant materials. Keywords including social inequality, cultural identity, sustainability, environmental justice, climate change, and inclusive development guided the search process.Special emphasis was placed on literature published between 2015 and 2026 to include contemporary perspectives and recent developments related to the topic.

Method of Data Analysis

The study uses thematic analysis as the primary method of analysis. Thematic analysis helps identify recurring themes, patterns, and relationships within the collected data. Major themes analysed in the study include social inequality, identity and representation, environmental sustainability, environmental justice, and inclusive governance.

The analysis shows that inequality, identity, and sustainability are deeply interconnected. Social inequality influences environmental vulnerability, identity shapes participation and recognition, and environmental degradation intensifies existing disparities. The study also includes a case study on air pollution inequality in Delhi to connect theoretical discussions with real-world social and environmental conditions.

Conceptual Framework of the Study



Scope of the Study

The study focuses on the relationship between inequality, identity, and sustainability in contemporary society within Indian and global contexts. It mainly covers scholarly discussions and developments between 2015 and 2026. The research does not involve primary surveys or statistical analysis and remains limited to qualitative interpretation of secondary data.

Limitations of the Study

The study is based entirely on secondary data and does not include fieldwork or interviews. Since the research follows a qualitative approach, the findings are interpretative rather than statistical. Regional and local variations may not be fully represented. However, the study provides a broad interdisciplinary understanding of contemporary social and environmental challenges.

The methodology provides a systematic and interdisciplinary framework for analysing the interconnected relationship between inequality, identity, and sustainability. The qualitative and thematic approach allows deeper understanding of social, cultural, and environmental realities. By using secondary data from books, journals, reports, and policy documents, the study develops a reliable and academically relevant analysis of contemporary social issues and highlights the importance of inclusive and sustainable development.

Discussion & Findings

The present study examined the interconnected relationship between inequality, identity, and sustainability in contemporary society through an interdisciplinary perspective. The analysis of academic literature, policy documents, international reports, and case studies revealed that these dimensions are deeply connected and continue to shape social realities across the world. The findings of the study demonstrate that social inequality, identity-based exclusion, and environmental challenges cannot be understood separately because they influence one another in multiple ways. Economic conditions affect access to opportunities and resources, identity shapes representation and participation, and environmental crises intensify existing inequalities within society. The study further revealed that despite economic

growth, technological advancement, and globalisation, large sections of society continue to experience social and economic exclusion. Vulnerable communities often face unequal access to education, healthcare, employment, housing, digital resources, and environmental protection. At the same time, issues related to identity and representation continue to influence how individuals and communities are recognised within social, political, and cultural institutions. Environmental sustainability has also emerged as one of the most urgent concerns of the modern world because climate change, pollution, and ecological degradation are increasingly affecting human life and development.

The findings and discussion presented in this chapter analyse the major themes that emerged from the research and explain how inequality, identity, and sustainability collectively influence contemporary

Social Inequality and Structural Exclusion

One of the major findings of the study is that social inequality continues to remain a serious challenge in contemporary society despite economic development and technological progress. The research revealed that inequality exists in various forms, including economic inequality, educational inequality, caste-based discrimination, gender inequality, and digital inequality. These forms of inequality often overlap and create long-term structural disadvantages for vulnerable communities.

The study found that economic inequality has increased significantly in recent decades due to unequal distribution of wealth, resources, and opportunities. A small section of society continues to control a large share of economic resources, while economically weaker populations struggle with poverty, unemployment, financial insecurity, and lack of access to essential services. Reports published by organisations such as Oxfam and the World Bank indicate that global wealth inequality remains extremely high despite continuous economic growth in many countries. The research revealed that economically privileged groups generally have better access to quality education, healthcare, housing, technology, and employment opportunities, while vulnerable populations often remain trapped within cycles of poverty and exclusion

The study also found that inequality is not only economic but deeply connected to social and institutional structures. In many societies, factors such as caste, ethnicity, religion, race, and gender continue to influence social mobility and access to opportunities. In the Indian context, caste-based inequality remains a significant issue despite legal reforms and affirmative action policies. Marginalised caste groups continue to face discrimination in education, employment, housing, and social

participation. Similarly, religious and ethnic minorities in different parts of the world often experience exclusion, underrepresentation, and unequal treatment within institutions and public systems.

The research further revealed that structural inequality becomes more visible during periods of crisis. The COVID-19 pandemic exposed the unequal distribution of healthcare facilities, digital access, employment security, and social protection systems. Informal workers, migrant labourers, and economically weaker populations were disproportionately affected during the pandemic because they lacked financial stability and institutional support. This finding suggests that social inequality remains deeply embedded within social and economic systems and continues to shape life opportunities and human experiences.

Identity Representation and Social Inclusion

Another important finding of the study is the significant role of identity in shaping social experiences, representation, and participation within society. Identity is influenced by various social and cultural factors such as gender, caste, religion, ethnicity, language, nationality, and culture. The study found that identity affects how individuals and communities are recognised within institutions, media, politics, and public discourse. The research revealed that representation remains unequal for many marginalised communities. Media, cinema, literature, and digital platforms often shape public understanding of different social groups. However, certain communities continue to face stereotyping, invisibility, and negative representation. Marginalised populations are frequently portrayed through limited narratives, which reinforces discrimination and social exclusion. Lack of representation reduces opportunities for participation and recognition within mainstream social and political systems.

Gender inequality emerged as another significant dimension of identity-based exclusion. Women continue to face unequal wages, workplace discrimination, limited leadership opportunities, gender-based violence, and unequal access to resources. The study also revealed that women belonging to economically weaker or marginalised social groups experience multiple forms of disadvantage simultaneously. Their experiences are shaped not only by gender but also by caste, class, and economic conditions. This reflects the concept of intersectionality, which explains how different forms of inequality overlap and reinforce one another.

The research also highlighted the growing importance of digital identity and social media in contemporary society. Digital platforms have created opportunities for social awareness, cultural expression, political participation, and activism. Marginalised

communities increasingly use online platforms to raise awareness regarding inequality, discrimination, and environmental justice. However, the study found that digital inequality remains a serious concern because unequal access to internet services, digital education, and technology limits participation for economically weaker populations. Online hate speech, misinformation, and identity-based harassment further demonstrate that social inequalities continue to exist within digital spaces as well.

Sustainability and Environmental Justice

One of the most significant findings of the study is that environmental sustainability is deeply connected to social inequality and justice. Environmental problems such as climate change, pollution, deforestation, water scarcity, and ecological degradation are increasingly affecting societies across the world. However, the study revealed that environmental risks are not distributed equally among populations. The research found that economically weaker and socially marginalised communities are more vulnerable to environmental hazards because they often live in polluted areas, environmentally unsafe settlements, and disaster-prone regions. Poor populations generally have limited access to healthcare, sanitation, clean water, and environmental protection measures. As a result, they experience greater exposure to pollution, climate-related disasters, and health risks.

The study also revealed that climate change has intensified existing social and economic inequalities. Communities dependent on agriculture, informal labour, and natural resources are more vulnerable to droughts, floods, heatwaves, and changing environmental conditions. Vulnerable populations often lack financial resources and institutional support needed for recovery after environmental disasters. Consequently, environmental crises further deepen poverty, displacement, and social instability. The concept of environmental justice emerged strongly within the study. Environmental justice emphasises that all communities should have equal access to a healthy environment and equal participation in environmental decision-making processes. However, the research found that vulnerable communities are frequently excluded from environmental governance and policymaking systems. As a result, they experience higher exposure to environmental risks while having limited influence over policies affecting their lives.

The findings indicate that sustainability cannot be achieved without addressing social inequality and ensuring inclusive governance. Environmental policies that focus only on economic development or ecological protection without considering social justice often fail to protect vulnerable populations effectively.

Case Study Discussion: Air Pollution Inequality in Delhi

The case study on air pollution inequality in Delhi provided practical understanding of how inequality, identity, and sustainability are interconnected within urban society. Delhi experiences severe air pollution due to industrial emissions, vehicular pollution, construction activities, waste burning, and crop residue burning. Although air pollution affects all sections of society, the study found that its impact is highly unequal. Economically weaker populations living near industrial zones, overcrowded settlements, and roadside areas experience greater exposure to polluted air. Informal workers such as construction labourers, street vendors, sanitation workers, and traffic police spend long hours outdoors and face higher health risks compared to economically privileged groups. Vulnerable communities often lack access to quality healthcare and protective resources, making them more susceptible to respiratory diseases and long-term health problems.

The study further revealed that many communities affected by environmental pollution belong to socially marginalised groups with limited political representation. Their concerns are often overlooked in urban planning and environmental policymaking processes. This case study demonstrates that environmental crises are also issues of social justice because environmental risks disproportionately affect vulnerable populations. The findings also suggest that sustainable urban development requires inclusive environmental governance. Policies aimed at reducing pollution should consider the experiences and needs of vulnerable communities rather than focusing only on technological or administrative solutions.

Overall, the findings suggest that creating a just and sustainable society requires inclusive governance, equitable policymaking, environmental responsibility, and greater recognition of marginalised communities. Sustainable progress can only be achieved when social justice, cultural inclusion, and environmental sustainability are treated as interconnected foundations of development.

Conclusion and Recommendations

The present study examined the interconnected relationship between inequality, identity, and sustainability in contemporary society through an interdisciplinary perspective. The research revealed that these dimensions are deeply connected and continue to influence social, cultural, economic, and environmental realities across the world. The findings of the study demonstrate that inequality is not limited only to economic differences but also includes social exclusion, unequal representation, environmental vulnerability, and limited participation in decision-making processes.

Factors such as caste, class, gender, religion, ethnicity, and economic background continue to shape access to opportunities, resources, and social recognition within society. The study further highlighted that identity plays an important role in shaping social experiences and representation. Marginalised communities often face discrimination, stereotyping, and underrepresentation within institutions, media, and governance systems. Although technological advancement and digital platforms have created opportunities for awareness and participation, unequal access to technology and digital resources continues to widen social disparities. The research also found that environmental sustainability has become one of the most urgent concerns of the contemporary world. Climate change, pollution, environmental degradation, and resource depletion are increasingly affecting human societies. However, vulnerable communities experience greater exposure to environmental risks because of poor living conditions, economic insecurity, and limited institutional support.

The case study on air pollution inequality in Delhi demonstrated how environmental challenges are closely linked with social inequality and justice. Economically weaker populations and informal workers face higher exposure to environmental hazards while having fewer resources for protection and healthcare. This reflects the broader reality that environmental crises disproportionately affect vulnerable communities and deepen existing inequalities within society. The study therefore concludes that inequality, identity, and sustainability cannot be understood separately because they influence one another and collectively shape contemporary social realities.

The research also emphasises that sustainable development cannot be achieved through economic growth alone. Development policies must address issues of social justice, cultural inclusion, environmental protection, and equal participation together. Governments and institutions should adopt more inclusive and equitable governance systems that ensure representation of marginalised communities in policymaking processes. Equal access to education, healthcare, digital resources, and employment opportunities should be strengthened in order to reduce structural inequality and improve social mobility.

The study further recommends that environmental policies should focus not only on ecological protection but also on environmental justice. Vulnerable populations living in polluted and environmentally unsafe regions should receive greater institutional support, healthcare access, and environmental protection measures. Public awareness regarding sustainability and social responsibility should also be promoted through education, media, and community participation. In addition, stronger implementation of environmental regulations, sustainable urban planning, and climate-responsive

development policies are necessary for reducing environmental risks and promoting long-term sustainability.

The research finally suggests that interdisciplinary approaches are essential for addressing contemporary social and environmental challenges effectively. Scholars, policymakers, and social organisations should work together to develop inclusive solutions that integrate social equality, cultural representation, and environmental sustainability. A just and sustainable society can only be achieved when development is based on equality, inclusion, participation, and environmental responsibility.

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Chapter 48: Living in the Line Rooms: Governance Failure and Spatial Inequality in the Nilgiris Tea Plantation Sector

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Abstract

Plantation settlements in the Nilgiris continue to reflect enduring forms of spatial inequality rooted in colonial plantation organisation and postcolonial neglect. This chapter examines how repatriated Indian-origin Tamil plantation workers experience housing insecurity, landlessness, and social marginalisation within line-room settlements in the Nilgiris tea sector. Drawing on qualitative fieldwork conducted in July 2025, including thirteen in-depth interviews, two focus group discussions, and one community meeting, the study highlights deteriorating housing conditions, insecure land tenure, environmental vulnerability, and limited access to infrastructure and public services. Despite formal citizenship, plantation communities continue to experience exclusion and institutional neglect, revealing the persistence of historically embedded inequalities. The findings demonstrate that housing and settlement arrangements function not only as welfare concerns but also as governance mechanisms that shape dependency, mobility, and social marginality within plantation regions. The chapter argues that meaningful reform requires secure land tenure, improved housing governance, and greater spatial inclusion within broader rural development frameworks. By foregrounding lived experiences within plantation settlements, the study contributes to debates on governance, social justice, and postcolonial inequality in labour-intensive agricultural regions.

Keywords: Plantation governance; policy voids; labour precarity; spatial inequality; Nilgiris tea sector; plantation labour.

1. Introduction

The Nilgiris district, located in the southern Indian state of Tamil Nadu, covers an area of 2,545 km² and had a population of 735,394 according to the 2011 Census of Tamil Nadu. Tea cultivation was introduced to the region under British colonial rule during the nineteenth century and expanded rapidly from the 1870s as part of a commercial plantation economy (Devi, 2022). Following Indian independence, many British-owned estates were transferred to Indian investors, further consolidating plantation production systems (van Driem, 2019). A major demographic and institutional transformation occurred after the Sirima–Shastri Pact, which facilitated the repatriation of Indian-origin Tamil plantation workers from Sri Lanka to India (Menon & Karthik, 2017). In response, the Government of Tamil Nadu established the Tamil Nadu Tea Plantation Corporation (TANTEA) in 1968 to provide employment and resettlement for repatriated communities (Government of Tamil Nadu, 1968).

The scale of this transformation is reflected in the plantation population increase from 66,057 in 1961 to 181,917 by 1991 (Census of India, 1961/1991). The Nilgiris currently contains approximately 59,462 hectares of tea cultivation, while this study estimates the repatriated plantation population in 2025 at around 375,000 based on field survey findings. Consequently, the development of the Nilgiris tea sector became closely tied to repatriated plantation labour.

The Nilgiris tea sector remains one of South India's most significant plantation economies, shaped by labour-intensive production and enduring colonial institutional structures (Selvaraj & Gopalakrishnan, 2016). Plantation systems historically operated through hierarchical labour arrangements and spatial control mechanisms that restricted workers' mobility and access to resources (Mintz, 1985; McMichael, 2013). Despite post-colonial political transitions, many of these structural inequalities continue to persist.

Repatriated Indian-origin Tamil plantation workers remain among the most marginalised groups within this system. Although repatriation granted formal citizenship, it did not resolve long-standing socio-economic exclusion. Instead, colonial labour hierarchies continued through institutional arrangements governing housing, employment, and welfare (Chatterjee, 2004). Workers continue to experience deteriorating line-room housing, landlessness, insecure employment, and weak institutional support, particularly within state-managed plantation systems such as TANTEA (Selvaraj & Gopalakrishnan, 2016). Limited livelihood opportunities and restricted access to resources have reinforced intergenerational vulnerability (Breman, 1996; Bernstein, 2010).

This chapter argues that labour precarity and spatial inequality in the Nilgiris tea sector are actively reproduced through governance failures and policy gaps rather than being merely residual effects of colonialism. The concept of policy voids highlights how weak implementation, institutional fragmentation, and uneven governance sustain marginalisation (Khanna & Palepu, 2010). By foregrounding the lived experiences of repatriated plantation workers, the study contributes to broader debates on governance, housing, labour welfare, and social justice within plantation economies.

2. Historical Foundations: Plantation Hierarchies and Repatriation

Colonial plantation economies in South Asia were organized through labour control, economic extraction, and spatial segregation (Selvaraj & Gopalakrishnan, 2016). Governance extended into workers' daily lives through wage dependency, housing systems, and restricted mobility. Estate management in India and Sri Lanka exercised centralized authority over employment and welfare, creating highly controlled plantation systems (Breman, 1996).

A central feature of this system was the recruitment of South Indian Tamil labourers to Sri Lanka for coffee and later tea cultivation (Wesumperuma, 1986). These labour regimes bound workers to estates under constrained conditions, where line-room housing functioned as a mechanism of spatial control and dependency (Devi, 2022).

After Sri Lanka's independence, Indian-origin Tamil plantation workers became socially and politically marginalised (Phadnis & Kumar, 1975). This led to the Sirima–Shastri Pact, which addressed citizenship through repatriation and relocation arrangements between India and Sri Lanka (Agreement on the Legal Status of Persons of Indian Origin in Ceylon, 1964). Many repatriated families were resettled in Tamil Nadu plantation regions, especially the Nilgiris, due to ecological similarity and limited settlement alternatives. The Government of Tamil Nadu established the Tamil Nadu Tea Plantation Corporation (TANTEA) in 1968 to support employment and resettlement (Government of Tamil Nadu, 1968).

By 2011, TANTEA employed 5,000 permanent workers and 2,000 temporary workers across 9 of 11 divisions; it now has 5,626 workers in eight divisions(https://tantea.nic.in/organisation.html), with a basic daily wage of ₹435–₹436 (I.I-09)

Despite these interventions, repatriation did not significantly alter structural marginality. Repatriated workers entered plantation systems that continued to

reproduce dependency through insecure employment, inadequate housing, and limited land access. Line-room settlements remained central to plantation spatial organization, reinforcing long-term socio-economic exclusion (McMichael, 2013).

Overall, there is strong continuity between colonial and post-colonial plantation governance. Post-independence interventions often reproduced inherited hierarchies in modified forms, leaving repatriated plantation workers in persistent, intergenerational insecurity.

3. Conceptual Framework: Policy Voids and Plantation Governance

Understanding labour precarity and spatial inequality in plantation economies requires attention to the institutional structures shaping workers' lives. This section draws on two interconnected perspectives—policy voids and plantation governance—to explain how historical inequalities are reproduced through contemporary governance arrangements.

3.1 Policy Voids and Institutional Gaps

Policy voids refer to weak implementation, fragmentation, or absence of institutional mechanisms intended to protect vulnerable populations (Khanna & Palepu, 2010; North, 1990). In the Nilgiris tea sector, these gaps are reflected in insecure housing, landlessness, limited welfare access, and declining institutional support for repatriated plantation workers. Although state initiatives such as TANTEA were introduced to support resettlement and employment, they failed to address structural exclusion adequately (Devi, 2022; Government of Tamil Nadu, 1968). Consequently, formal policies coexist with weak implementation, limiting workers' access to rights and protections (Rodrik, 2008).

3.2 Plantation Governance and Labor Hierarchies

Plantation governance refers to systems regulating labour, housing, and everyday life within plantation economies. Historically, plantations operated through hierarchical labour regimes in which control extended beyond production into workers' social and spatial conditions (Mintz, 1985; Breman, 1996). Line-room housing remains central to this system, reinforcing labour dependency, spatial confinement, and restricted mobility. Bernstein (2010) argues that agrarian labour systems reproduce inequality across generations through limited access to land and livelihoods. In the Nilgiris, estate-based employment, insecure housing, and restricted mobility continue to reflect plantation governance as a mechanism of social and economic control.

3.3 Comparative Plantation Contexts

Comparative studies from Assam, West Bengal, and Sri Lanka show that the governance problems identified in the Nilgiris reflect broader plantation patterns across South Asia. Bhowmik (2015) notes that plantation housing in Assam, West Bengal, and Tamil Nadu remained inadequate even after labour reforms, with estate management often neglecting maintenance responsibilities. Similarly, studies of Sri Lankan plantations demonstrate how Indian-origin Tamil workers experienced exclusion through citizenship restrictions, labour dependency, and spatial isolation (Daniel, 2009; Liyanage, 1992). These continuities indicate that plantation precarity is shaped not only by economic conditions but also by institutional structures inherited from colonial labour regimes.

However, the Nilgiris case remains distinct due to the repatriation process under the Sirima–Shastri Pact and the establishment of TANTEA as a state-led rehabilitation mechanism. Repatriated workers therefore occupy a unique position shaped by citizenship transition, state-managed resettlement, and plantation dependency.

3.4 Governance, Inclusion, and Social Justice

Despite increasing policy attention to inclusive development, plantation regions remain weakly integrated into broader development frameworks (International Labour Organization, 2015; Newell & Mulvaney, 2013). In the Nilgiris, repatriated workers continue to experience insecurity in housing, land, and employment, demonstrating that formal interventions do not necessarily ensure meaningful inclusion. This highlights the need for governance approaches that address structural inequality rather than fragmented welfare measures.

3.4 Synthesis

This framework integrates three key perspectives to explain labour precarity and spatial inequality in plantation economies. First, policy voids show how fragmented governance and weak enforcement sustain marginality despite formal policies (North, 1990; Rodrik, 2008). Second, plantation governance explains how colonial labour hierarchies and spatial control mechanisms continue to shape contemporary working and living conditions (Mintz, 1985; Breman, 1996). Third, the just transition framework emphasises that sustainability and reform must include social justice within historically marginalised sectors (International Labour Organization, 2015; Newell & Mulvaney, 2013). Together, these perspectives demonstrate that labour precarity in the Nilgiris is reproduced through governance failures and institutional continuity rather than isolated economic factors.

4. Methodology

This study adopts a qualitative research approach to examine how governance structures and policy gaps shape the lived experiences of repatriated Indian-origin Tamil plantation workers in the Nilgiris tea sector. A qualitative design is appropriate for analysing labour precarity, spatial inequality, and institutional marginalisation, which cannot be fully understood through quantitative indicators alone. The study prioritises lived experiences to understand how plantation governance operates in everyday life.

4.1 Research Design and Field Sites

Fieldwork was conducted over one week in July 2025 in the plantation regions of Gudalur and Pandalur in the Nilgiris district of Tamil Nadu. These locations were selected due to the high concentration of repatriated plantation communities residing in colonial-era line-room settlements associated with tea estates (Selvaraj & Gopalakrishnan, 2016).

The study employed purposive and community-based sampling strategies. Initial access was facilitated through community leaders, followed by informal visits to plantation households. Participation was voluntary and based on informed consent.

The research combined surveys, archival and census-based data collection, thirteen in-depth interviews, two focus group discussions, one community meeting, and field observation to enable methodological triangulation and strengthen contextual understanding of plantation governance and lived experiences.

4.1.1 In-Depth Interviews

Thirteen semi-structured interviews were conducted with first- and second-generation repatriated plantation workers, including both male and female participants. Interviews explored housing, labour conditions, land access, institutional support, identity, and social exclusion.

Most interviews lasted between 45 and 90 minutes, although two interviews with elderly non-literate female participants were shorter due to difficulties recalling historical experiences. All interviews were conducted in Tamil, audio-recorded with consent, transcribed using NotebookLM AI, translated into English using Grok AI, and manually reviewed for contextual accuracy.

4.1.2 Focus Group Discussions and Community Meeting

Two focus group discussions involving approximately 10–15 participants were conducted within plantation settlements. These discussions provided insight into shared experiences of labour insecurity, housing conditions, institutional neglect, and generational differences.

In addition, a large community meeting involving approximately 100 participants and local government representatives was conducted at a community centre. The meeting enabled observation of collective grievance articulation, political mobilisation, and community engagement with local governance structures.

Participant demographic profiles are summarised in Tables 1–3.

Table 1

Profile of Study Participants by Interview Type, Demographic Characteristics, and Employment Status

Participant type	Code	Age	Generation	Gender	Education Level	Employment status
Individual interview	I.I-01	70	1st	Female	No formal education	Retired
Individual interview	I.I-02	87	1st	Male	Up to Grade 7	Retired
Individual interview	I.I-03	80	1st	Male	Up to Grade 5	Retired
Individual interview	I.I-04	80	1st	Female	Up to Grade 3	Retired
Individual interview	I.I-05	74	1st	Male	Up to Grade 3	Retired
Individual interview	I.I-06	74	1st	Male	Degree holder	Retired (former bus conductor)
Individual interview	I.I-07	80	1st	Male	Up to Grade 10	Retired
Individual interview	I.I-08	34	2nd	Male	Up to Grade 10	Labourer (Coolie)
Individual interview	I.I-09	40	2nd	Male	Up to Grade 10	Labourer (Coolie)
Individual interview	I.I-10	65	1st	Male	Up to Grade 5	Labourer (Coolie)

Individual interview	I.I-11	45	2nd	Female	GCE A/L	Health officer
Individual interview	I.I-12	40	2nd	Male	Up to Grade 3	Labourer (Coolie)
Individual interview	I.I-13	50	2nd	Male	GCE O/L	Tea factory worker

Table 2

Profile of Focus Group Discussions (FGDs)

Participant type	Code	Age range	Generation	Gender composition	Education level	Employment status
Focus group discussion	F.G.D-01	40–60	2nd	Male group	Some graduates, GCE O/L, GCE A/L	Business, labourers, tea factory workers
Focus group discussion	F.G.D-02	40–60	2nd	Mixed (male and female)	Grade 3 to GCE A/L	Mostly unemployed females

Table 3

Profile of Community Meeting ParticipantsAbbreviations

Participant type	Code	Age range	Generation	Gender composition	Education	Roles/occupations
Community meeting	C.M-01	40–70	1st and 2nd	Mixed (approx. 100 participants)	Grade 3 to graduate level	Union leaders, political party members, teachers, midwives, community leaders, local government representatives

I.I – Individual Interviews

F.G.D – Focus Group Discussions

C.M – Community Meetings

4.1.3 Field Observation

Field observations were conducted within plantation settlements and line-room housing areas. Observations focused on housing conditions, settlement layouts, infrastructure access, environmental vulnerability, and proximity to plantation estates and forest areas. These observations supported analysis of the relationship between labour, housing, and spatial inequality.

4.2 Data Analysis

Data were analysed using thematic analysis supported by NVivo software. Interview transcripts, focus group discussions, field notes, and community meeting observations were systematically coded to identify recurring themes relating to labour precarity, housing insecurity, landlessness, institutional decline, identity-based exclusion, and governance failures.

The analysis combined inductive and conceptually informed coding procedures. Initial open coding identified recurring patterns emerging from participant narratives, followed by thematic grouping linked to the study's conceptual framework on policy voids and plantation governance. Data saturation was considered achieved when later interviews and discussions produced recurring patterns with minimal emergence of new thematic categories.

4.3 Researcher Positionality and Ethical Considerations

Participants were informed about the purpose of the study and provided voluntary consent prior to participation. Confidentiality and anonymity were maintained throughout the research process.

The researcher's Sri Lankan background facilitated trust-building and participant openness, particularly among repatriated communities with historical connections to Sri Lanka. Some participants were also able to communicate partially in Sinhala, which strengthened rapport during interviews. Reflexive attention was maintained throughout

the research process to minimise interpretive bias arising from cultural and linguistic proximity.

Given the sensitivity of topics such as labour precarity, housing insecurity, and institutional neglect, interviews were conducted in locations selected by participants to ensure comfort and confidentiality.

4.4 Scope and Limitations

This study focuses on repatriated Indian-origin Tamil plantation workers in the Nilgiris tea sector and is based on a small, region-specific qualitative sample, so findings are not statistically generalisable. It reflects a short fieldwork period in July 2025, providing a snapshot of governance and lived experiences, with longer-term study potentially revealing additional dynamics.

Participant access through community leaders may have limited the diversity of views, and translation and transcription may involve minor interpretive limitations. Some participants may also have been cautious in discussing sensitive political issues.

Despite these limitations, the study offers rich qualitative insights into governance failure, labour precarity, and structural inequality in plantation systems.

5. Empirical Findings

5.1 Housing Insecurity and Spatial Inequality as Governance Failure

This section argues that housing insecurity among repatriated Indian-origin Tamil plantation workers in the Nilgiris is a structurally produced outcome of plantation governance rather than a result of poverty alone. Housing operates as a mechanism of labour control that reinforces dependence on plantation employment, restricts mobility, and sustains long-term marginalisation.

The findings highlight the continued reliance on colonial-era line-room settlements, which remain inadequate and unsafe, with persistent issues such as poor sanitation, leaking roofs, and lack of basic infrastructure (I.I-3; C.M-01). These conditions demonstrate continuity between historical deprivation and present-day housing insecurity.

A major structural issue is the absence of secure land ownership, with widespread lack of land titles limiting access to credit, legal security, and economic mobility (I.I-12; I.I-13). Many settlements remain located on plantation or forest land, creating ongoing

insecurity, eviction threats, and dependence on plantation employment. Historical state commitments, such as those under the Sirima–Shastri agreement, are reported as unfulfilled (C.M-01).

Housing insecurity is further reinforced by conditional residence linked to employment and disputes with forest authorities over land rights (I.I-12). Spatial inequality compounds these vulnerabilities, as communities are located in remote, forest-adjacent areas with limited infrastructure, including roads, electricity, healthcare, and education (I.I-9; F.G.D-01). This isolation restricts access to basic services and livelihood opportunities, reinforcing long-term exclusion and weakening political accountability, which respondents perceive as largely election-driven.

Overall, the findings show that housing insecurity, landlessness, and spatial marginalisation are interconnected governance failures rather than isolated issues. Housing functions both as a material condition and as a tool of labour control that deepens dependency and limits mobility. The section calls for structural reforms, including secure land tenure, spatial integration, and recognition of housing as a core element of labour welfare and social justice. It also notes that these conditions disproportionately affect women, particularly in relation to sanitation, privacy, and domestic responsibilities.

5.2 Institutional Decline and the Limits of State-Led Plantation Governance

This section finds that state-led plantation governance, particularly through the Tamil Nadu Tea Plantation Corporation (TANTEA), has significantly weakened over time, reflecting declining institutional capacity and fragmented governance. While TANTEA initially played a key role in rehabilitating repatriated Indian-origin Tamil workers through employment and plantation development, its current functioning demonstrates reduced effectiveness and limited state support.

Participants highlight its early contribution to labour-based settlement and plantation expansion, noting their long-term involvement in establishing tea cultivation systems (F.G.D-02). However, this initial role has diminished, with respondents describing TANTEA as having declined in quality and engagement over time (C.M-01).

A major concern is the increasing lack of transparency in recruitment and job allocation. Participants report informal practices such as bribery, preferential hiring, and exclusion based on regional or social networks, suggesting that access to employment is no longer governed by formal rules (F.G.D-01; F.G.D-02). This has contributed to perceptions of inequality and unfairness in job distribution.

The findings also indicate administrative inefficiencies, labour shortages, and reduced plantation maintenance, alongside allegations of corruption and weak accountability within production and reporting systems (C.M-01). These issues reflect a broader breakdown in institutional oversight.

Overall, TANTEA is described as functioning as "partial governance," where institutional structures remain in place but fail to effectively regulate labour conditions or ensure equitable employment. This decline has contributed to employment instability, labour outmigration, and increased pressure on remaining workers. The section concludes that this institutional weakening reflects broader governance failures, where gaps between policy intent and implementation produce long-term systemic instability in plantation governance.

5.3 Labour Precarity and the Transformation of Plantation Work

This section finds that plantation labour in the Nilgiris is undergoing a structural shift from relatively stable, estate-based employment to increasingly insecure and flexible forms of work. The earlier system linking housing and long-term plantation employment is weakening, without being replaced by secure alternative livelihoods.

A key feature of this transformation is wage instability and rising productivity demands. Workers report increased output targets alongside stagnant daily wages, reflecting a shift toward performance-based labour that heightens economic vulnerability (I.I-9). This change increases work intensity while offering limited financial improvement.

The findings also highlight gendered dimensions of precarity. Women workers report deteriorating plantation conditions and reduced employment opportunities, leading many to move into informal domestic or non-plantation work (I.I-9). This indicates a shrinking capacity of plantation systems to provide stable female employment.

Job security has further declined, with permanent employment increasingly replaced by temporary or casual labour arrangements. At the same time, access to social protection such as insurance and healthcare remains limited or absent, reinforcing structural vulnerability (F.G.D-02).

Generational change intensifies these trends, as younger workers increasingly avoid plantation labour due to low wages and insecurity, yet face limited alternative employment options.

Overall, the findings show a condition of growing labour precarity, where workers are no longer supported by stable plantation systems nor fully absorbed into secure labour

markets (Breman, 1996). Plantation work is thus characterised by fragmented insecurity, weakened protections, and constrained livelihood mobility, reflecting a broader transformation from structured dependency to unstable labour relations.

5.3.1 Gendered Dimensions of Labour Precarity

This section shows that labour precarity and housing insecurity in plantation economies are experienced unevenly across gender lines, with women disproportionately affected. Women workers report increasingly unstable and physically demanding plantation work, particularly within TANTEA estates, leading many to exit plantation employment in search of informal work outside the estate system (I.I-9). This shift reflects the declining capacity of plantation labour to provide sustainable livelihoods for women.

As a result, women increasingly engage in informal and casual employment such as domestic work. While this provides limited income, it is typically insecure and lacks labour protections, contributing to a dual burden of economic vulnerability and domestic responsibilities. The section also highlights that women's limited educational attainment and lack of access to skill development contribute to their restricted employment opportunities within and beyond plantation work.

Housing conditions further intensify gendered precarity. Overcrowded line-room settlements, poor sanitation, and lack of privacy disproportionately affect women's health, safety, and daily domestic labour. Inadequate infrastructure, including the absence of basic facilities, shapes women's lived experience of plantation settlements and reinforces structural inequality.

Additionally, dependence on plantation-linked housing restricts women's mobility and limits access to independent livelihoods, reinforcing broader patterns of dependency. Overall, the findings demonstrate that labour precarity in plantation contexts is not gender neutral but is deeply shaped by intersecting inequalities of space, housing, education, and institutional neglect.

5.4 Structural Marginality, Identity, and Postcolonial Exclusion

This section argues that structural marginality in plantation communities is shaped not only by economic deprivation and weak institutions but also by enduring identity-based exclusion. Despite formal citizenship, plantation workers continue to experience social and administrative marginalisation, revealing a persistent gap between legal status and lived inclusion.

A key finding is the continued stigma attached to identities such as “Ceylon Tamil,” “Ceylonkaran,” and “Kandykaran,” which position plantation communities as socially inferior within broader hierarchies. Participants describe discrimination rooted in these labels, showing how historically produced identities continue to structure exclusion and reinforce inequality (F.G.D-02).

These identity distinctions have material consequences, affecting access to employment, mobility, and state services. Respondents report that even in bureaucratic settings, citizenship is questioned or undermined, demonstrating how administrative practices reproduce exclusion despite formal equality (I.I-11).

This produces a condition of partial inclusion, where communities are formally recognized as citizens but remain socially and institutionally marginal. Everyday interactions and weak policy engagement with plantation regions further reinforce this marginalisation, as development efforts remain fragmented and largely limited to short-term welfare interventions.

Overall, identity operates as a mechanism of governance that shapes access to resources and opportunities. Structural marginality emerges through the interaction of postcolonial identity hierarchies and institutional neglect, reinforcing dependency and limiting mobility.

5.4.1 Everyday Agency and Adaptive Strategies

This subsection highlights that, despite structural exclusion, plantation communities—particularly women—develop everyday adaptive strategies to navigate constraints. However, women experience these exclusions more acutely due to gendered limitations in employment mobility, access to institutional support, and broader socio-economic opportunities, further deepening their marginalisation within plantation systems.

5.5 Worker Voice, Resistance, and Collective Action

This section shows that despite widespread experiences of precarity, institutional neglect, and limited governance responsiveness, plantation workers also demonstrate forms of agency through resistance and collective action. However, many participants report a strong sense of political marginalisation, with repeated responses indicating that workers feel they have little or no ability to raise concerns or influence decision-making within existing institutional structures (I.I-01, 03, 04, 05, 06, 07, 10).

At the same time, the findings highlight the existence of organised and informal collective mobilisation within plantation communities. Participants refer to repatriate organisations such as "Thayagam Thirumbiya Malayaga Makkal Amaippu," which attempted to articulate community grievances and mobilise political voice (I.I-02). Although these efforts were often described as having limited success, they reflect ongoing attempts at collective organisation under conditions of marginality.

Workers also report engagement in protests and struggles related to employment, bonuses, ration cards, land rights, and wildlife-related insecurity (I.I-03, 05, 06). While some efforts led to partial gains such as improved access to ration cards, others—particularly land-related struggles—were largely unsuccessful. Participants also describe instances of suppression, including intimidation and police intervention during labour protests, particularly around bonus disputes (I.I-06), illustrating the unequal power relations shaping resistance.

The findings further indicate a growing awareness of the importance of political representation and electoral engagement, with some participants arguing for stronger independent leadership to address structural issues such as land rights and documentation (C.M-01). This reflects an evolving understanding of citizenship as active political participation rather than only legal status.

At the same time, respondents express scepticism about formal trade unions, describing them as weak or disconnected from workers' lived realities (I.I-13). Nevertheless, informal participation in collective actions continues, indicating that resistance persists even when institutional representation is limited.

Overall, the findings demonstrate that plantation workers are not passive subjects of governance failure. Instead, they actively engage in negotiation, protest, and collective mobilisation. However, these efforts remain constrained by fragmented organisation, weak institutional responsiveness, and structural power imbalances, which limit their effectiveness and contribute to the persistence of precarity and marginalisation.

6. Governance Gaps in Plantation Production Systems

This section argues that plantation production systems are shaped less by market forces and more by deep governance failures, institutional fragmentation, and policy inconsistencies. These governance gaps structure labour conditions, production stability, and long-term sustainability.

6.1 Policy Voids and Production Systems

A central issue is the presence of policy voids where labour protections, housing, and welfare provisions exist but are weakly or inconsistently implemented. This creates a gap between production requirements and workers' lived realities. Insecure wages, informal labour arrangements, and deteriorating housing (including line-room settlements and landlessness) generate instability in both livelihoods and plantation production systems.

6.2 Trade and Industrial Policy Disconnect

There is a clear separation between export-oriented economic policies and labour governance. While tea production is prioritised for competitiveness and revenue generation, labour welfare and working conditions are not integrated into industrial planning. Institutions such as TANTEA operate in a fragmented and limited manner, reinforcing uneven governance across the sector.

6.3 Structural Vulnerability

Because labour is insecure and governance is fragmented, plantation systems are highly vulnerable to external shocks such as market fluctuations and environmental change. These risks are not absorbed institutionally but are transferred directly onto workers through wage instability, job insecurity, and intensified labour demands, making vulnerability a structural feature of the system.

6.4 Limits of Just Transition

Although "just transition" and sustainability frameworks are increasingly used in policy discourse, their impact remains limited in plantation contexts. This is because they often focus on environmental or technical improvements while ignoring structural inequalities such as landlessness, housing insecurity, and weak labour protections. As a result, they do not address the root causes of precarity.

6.5 Governance Gaps as Structural Determinants

Overall, governance gaps are not peripheral issues but central determinants of how plantation production systems function. These gaps shape labour stability, risk distribution, and institutional resilience. Without coherent and integrated governance,

plantation systems continue to reproduce precarity, inequality, and structural instability rather than resolving them.

The governance dynamics identified in the Nilgiris reflect broader patterns observed across plantation economies in South Asia and other postcolonial contexts. Similar relationships between labour dependency, housing insecurity, and institutional fragmentation have been documented in plantation regions such as Assam, Darjeeling, and Sri Lanka. However, the Nilgiris case is distinct in the way repatriation policies and state-led rehabilitation through TANTEA intersect with plantation governance, producing a unique form of postcolonial marginality. This demonstrates how broader plantation structures operate through locally specific institutional histories.

7. Reimagining Resilient and Accountable Plantation Governance

This section argues that plantation governance problems are structurally embedded across labour, land, and institutional systems. It calls for a shift from fragmented interventions to an integrated and accountable governance framework that enhances resilience while addressing long-standing inequalities.

7.1 Land and Housing Reform

This section identifies land and housing as central to the reproduction of labour precarity and spatial marginalisation. It argues that continued reliance on colonial-era line-room housing reflects labour control rather than only poor infrastructure. Secure land tenure—through ownership, leases, or collective arrangements—is necessary to reduce dependency and improve socio-economic stability.

Housing reform should move beyond incremental improvements and integrate plantation settlements into broader rural development planning to reduce isolation, improve access to services, and strengthen both welfare and labour stability.

Implementation requires coordination between the Government of Tamil Nadu, district administrations, plantation management institutions, and rural development agencies. Priority should be given to legal regularisation of long-term settlements through phased land-tenure programmes, especially in estate and forest-adjacent areas.

Short-term actions include settlement-level surveys to identify households lacking land titles and basic infrastructure. Medium-term reforms involve state-supported housing schemes linked to rural development programmes. Long-term reforms require

restructuring estate-based settlement systems to reduce dependence on plantation employment.

However, reforms face major constraints including land disputes (plantation companies and forest authorities), weak administrative coordination, and financial limitations, requiring sustained interdepartmental collaboration and long-term political commitment beyond welfare-oriented approaches.

7.2 Strengthening Labour Governance

This section argues that increasing labour precarity requires stronger regulation of wages, working conditions, and social protection systems. Wage systems must be stable and enforced, and access to healthcare, pensions, and welfare should not depend solely on employment status.

Worker representation must be strengthened through unions and participatory governance to address structural power imbalances. These reforms aim to close the gap between policy frameworks and actual labour conditions.

Implementation requires coordination among labour departments, plantation management bodies, trade unions, and welfare agencies. Immediate priorities include enforcing labour laws, ensuring timely wage payments, and expanding healthcare and social protection for informal and temporary workers.

Medium-term reforms should strengthen collective bargaining mechanisms, improve worker representation, and enhance grievance redress systems through independent organisations and institutional channels.

Key constraints include employer resistance due to cost pressures in the tea sector and fragmented union structures that weaken bargaining power. Labour reforms therefore require balancing economic viability with social protection.

7.3 Institutional Accountability

This section identifies institutional fragmentation and weak coordination as central governance failures, despite the presence of bodies such as TANTEA, whose effectiveness is limited by inconsistent implementation and overlapping responsibilities.

Improving accountability requires clearer institutional roles, stronger monitoring systems, transparency, and better coordination between public and private actors.

In practice, reforms should include transparent recruitment processes, regular public audits, and improved monitoring of labour and welfare conditions, particularly within TANTEA.

District-level oversight committees involving government representatives, labour organisations, and community members could strengthen accountability and reduce implementation gaps. Greater transparency in employment, welfare distribution, and housing allocation would also build institutional trust.

However, reforms may face resistance from entrenched bureaucratic systems, fragmented administration, and limited financial capacity. Success depends on institutional willingness and long-term governance commitment.

7.4 Inclusive Transition Pathways

This section argues that transition policies must address structural inequalities rather than focusing only on technical or managerial reforms. A meaningful transition must simultaneously address land insecurity, labour precarity, and social exclusion.

Inclusive governance should integrate social justice with economic goals, ensuring that efficiency and welfare are not treated as opposites. Investments in education, skills development, and alternative livelihoods are essential for long-term resilience.

Reforms should prioritise education, skill-building, and livelihood diversification for younger generations, supported through collaboration between educational institutions, rural development agencies, and employment services to expand non-plantation job opportunities.

Implementation should be sequential: immediate priorities include securing land, housing, and labour protections, while long-term strategies focus on economic diversification and social mobility. Without addressing structural inequalities first, development initiatives risk reinforcing exclusion.

Finally, plantation communities must be included in governance processes through participatory consultation mechanisms at local and district levels to ensure reforms reflect lived realities rather than externally imposed models.

8. Conclusion

This study shows that labour precarity in plantation economies is a structurally produced condition shaped by historical legacies, fragmented institutions, and policy

neglect. Conditions such as line-room housing, landlessness, and spatial segregation operate not only as welfare deficits but also as mechanisms of labour control that shape mobility and dependence. The shift toward insecure employment reflects weaknesses in labour governance rather than market forces alone.

Persistent policy gaps across housing, wages, land, and labour protections further deepen vulnerability, as institutions like TANTEA operate with limited coherence and inconsistent implementation. These fragmented governance arrangements contribute directly to the reproduction of insecurity among plantation workers.

Plantation production systems themselves are shown to be structurally linked to inequality, as labour organisation and production outcomes are shaped by governance relations rather than neutral economic processes. Where governance is weak, instability becomes embedded within the system.

The study therefore argues for integrated governance reform addressing land rights, housing, wages, and social protection within a coordinated framework. Any transition strategy must also account for historical inequalities and avoid reproducing existing exclusions.

These inequalities are also gendered, as women experience plantation precarity through insecure labour, domestic burdens, and unequal access to housing and welfare protections.

Overall, the study concludes that labour precarity and spatial marginalisation in plantation systems are produced through governance structures, and addressing them requires a shift toward more coherent, accountable, and inclusive forms of plantation governance.

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Chapter 49: Emotional Intelligence As A Catalyst For Career Success

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Abstract

Emotional intelligence has become an essential competency for achieving career success in the contemporary professional world. In addition to academic knowledge and technical skills, individuals are expected to manage emotions effectively, communicate efficiently, and maintain positive interpersonal relationships in their workplace. This chapter examines the concept of emotional intelligence and its influence on career success. This chapter emphasizes research that demonstrate EI contributes to both objective career outcomes (salary, promotions, rank) and subjective outcomes (job satisfaction, well-being, sense of accomplishment). Furthermore, it emphasizes strategies for developing emotional intelligence through education, training, and personal development practices. The chapter concludes that emotional intelligence is a vital factor contributing to personal satisfaction, professional achievement, and long-term career success in today's dynamic work environment.

Keywords: Emotional Intelligence, Employability, Career Success Leadership, Professional Development.

Introduction

The modern workplace is characterized by rapid technological advancements, increasing diversity, and evolving professional demands. In such a dynamic environment, career success depends not only on technical expertise and academic qualifications but also on emotional and interpersonal competencies. Employers increasingly seek professionals who can communicate effectively, collaborate with others, adapt to change, and manage workplace stress efficiently. Consequently, emotional intelligence has gained significant importance in career development and organizational success.

The concept of Emotional Intelligence was popularized by Daniel Goleman, who emphasized that emotional competencies often contribute more to professional success than intellectual intelligence alone. Emotional intelligence enables individuals to understand their own emotions and those of others, regulate emotional responses, and maintain healthy relationships in both personal and professional settings.

Career success refers to the achievement of career-related goals, including professional growth, job satisfaction, recognition, financial stability, and psychological well-being.

Emotional Intelligence

Emotional Intelligence (EI) refers to the ability to perceive, understand, manage, and utilize emotions effectively. It involves recognizing emotional states in oneself and others and using emotional information to guide thinking and behaviour. Emotional intelligence (EI) has been explained through different theoretical models. These models describe the nature, components, and functioning of emotional intelligence in personal, social, and professional contexts. The major emotional intelligence models include the Ability Model, Mixed Model, Trait Model, and Emotional-Social Intelligence Model.

The Ability Model of Emotional Intelligence emphasizes the individual's actual capacity to process emotional information and use it effectively. It includes the ability to perceive, understand, manage, and regulate emotions in oneself and others. This model views emotional intelligence as a form of cognitive ability that helps individuals navigate social situations and make informed decisions. This model was developed by John D. Mayer and Peter Salovey. This model has four core abilities:

1) **Perceiving emotions**: the ability to detect and decipher emotions in faces, pictures, voices, and cultural artifacts—including the ability to identify one's own emotions.

This is the basic layer because all other EI processes depend on correctly detecting emotional signals.

Individuals who can perceive emotions effectively are more aware of social interactions and interpersonal dynamics. In workplaces, this ability improves communication and relationship management.

2) **Using emotions**: the ability to harness emotions to facilitate various cognitive activities, such as thinking and problem-solving. The emotionally intelligent person can "ride" shifting moods to fit the demands of different tasks.
3) **Understanding emotions**: the ability to comprehend emotion language and to appreciate complicated relationships among emotions. Understanding emotions enables individuals to predict emotional reactions and respond appropriately in interpersonal and workplace situations.
4) **Managing emotions**: the ability to regulate emotions in both ourselves and in others. Individuals who manage emotions effectively can handle stress, control impulsive behavior, and maintain healthy relationships, contributing to career and personal success.

The Ability Model is psychometric and test-based, emphasizing actual performance on EI tasks (similar to IQ tests), and it aims to fit EI within classical intelligence theory. It is conceptually "pure" but harder to measure because it deals with skills, not just self-reports.

The Mixed Model of Emotional Intelligence integrates aspects of both trait and ability models. It combines emotional skills, competencies, and personality traits, such as motivation, self-regulation, social skills, and emotional awareness. This model provides a comprehensive understanding of emotional intelligence by linking emotional abilities with workplace performance and leadership effectiveness.

The Mixed Model introduced by Daniel Goleman focuses on EI as a wide array of competencies and skills, which drive leadership performance in applied settings.

The key dimensions include:

2 **Self- Awareness**: the ability to know one's emotions, strengths, weaknesses, drives, values, and goals and recognize their impact on others. Self-aware individuals understand how emotions influence behavior and decision-making. They are more confident and realistic about their capabilities.

3 **Self-regulation**: involves controlling or redirecting one's disruptive emotions and impulses and adapting to changing circumstances. Individuals with strong self-regulation remain calm during stressful situations and demonstrate professionalism in workplaces.

4 **Social skill** – managing relationships to get along with others. Strong social skills help individuals establish professional networks, collaborate effectively, and achieve organizational success.

5 **Empathy** – considering other people's feelings especially when making decisions. Empathy strengthens interpersonal relationships, teamwork, and leadership effectiveness by promoting understanding and cooperation.

6 **Motivation** – being aware of what motivates them. Emotionally intelligent individuals are often optimistic, achievement-oriented, and persistent in overcoming professional challenges.

The Mixed Model is application-oriented and very popular in business and education because it translates EI into observable behaviors and training programs.

The Trait Model of Emotional Intelligence focuses on an individual's self-perceptions of their emotional abilities. It emphasizes personality traits and behavioural dispositions, which are typically measured through self-report questionnaires. This model reflects how individuals perceive their own emotional competencies, such as empathy, emotional awareness, and stress management. This was developed by Konstantinos V. Petrides.

The Trait Model is practical and easy to assess in organizational and counselling settings, but critics argue it overlaps heavily with general personality and may not measure "intelligence" in a strict cognitive sense. Conceptually, it is useful for understanding emotional confidence and coping styles rather than raw emotional-reasoning skill.

The Emotional-Social Intelligence Model was proposed by Reuven Bar-On. This model defines emotional intelligence as a set of emotional and social competencies that influence an individual's ability to cope effectively with environmental demands.

The model includes five broad areas:

- Intrapersonal Skills – These involve self-awareness, self-expression, and emotional understanding. Strong intrapersonal skills help individuals understand their emotions and maintain self-confidence.

- Interpersonal Skills – These include empathy, social responsibility, and relationship management. Interpersonal competencies improve teamwork, communication, and social interaction.
- Stress Management – This refers to emotional control and tolerance during difficult situations. Effective stress management contributes to resilience, emotional stability, and workplace adjustment.
- Adaptability – Adaptability involves flexibility, problem-solving, and realistic thinking. Adaptable individuals can respond positively to organizational changes and professional challenges.
- General Mood – This area includes optimism and happiness. Positive mood states improve motivation, productivity, and psychological well-being.

Understanding Career Success

Career success is a multidimensional concept that includes professional growth, job satisfaction, achievement of career goals, financial stability, recognition and rewards, and opportunities for career advancement. It also encompasses work–life balance, job security, psychological well-being, autonomy in decision-making, social status, and the ability to make meaningful contributions to society through one's profession. Career success is classified into two major dimensions: **Objective Career Success** and **Subjective Career Success**. These dimensions help in understanding both the external achievements and internal satisfaction experienced by individuals in their careers.

Objective career success

It refers to measurable achievements such as:

1) Salary and financial rewards
2) Promotions and career advancement
3) Professional recognition
4) Job position and status

Subjective career success

It refers to personal satisfaction and fulfilment including:

- Job satisfaction
- Work-life balance
- Psychological well-being
- Sense of accomplishment

- Career commitment

Several factors contribute to objective and subjective career success as they involve in career success equally. Such factors include Educational qualifications, Technical competencies, Work experience, Leadership abilities, Communication skills, Organizational support, Professional networking, Emotional intelligence, Motivation and commitment, Personality traits, Career interests, Self-esteem and confidence, Workplace relationships, Family support, Mental health and well-being.

How Emotional Intelligence Contributes to Career Success

In contemporary knowledge‑intensive organizations, technical skills are necessary but not sufficient for career success; relational and self‑regulatory competencies captured by emotional intelligence act as catalysts that amplify the impact of human capital on both objective and subjective outcomes**.**

The study conducted by Urquijo (2019) shows that emotionally intelligent employees tend to manage stress better, maintain more positive workplace relationships, and reduce negative job outcomes, all of which can improve performance and advancement opportunities. Recent meta-analytic and systematic review shows that EI is significantly related to career adaptability and career decision-making self-efficacy (Pirsoul, 2023). Form the systematic review conducted by Sharma and Tiwari (2024) discusses EI in three main roles: EI as an antecedent role functions as a psychological resource that shapes how individuals process feedback, manage stress, and interpret career opportunities, thereby influencing career planning and boundary‑spanning behaviors. The mediating role of EI mediates the relationship between personality traits, career commitment, and both intrinsic and extrinsic career outcomes, suggesting that EI converts stable traits into active career behaviors. EI as moderating role, moderate the effect of traits such as career commitment on success: highly committed individuals with strong EI gain more from their commitment than those with low EI.

Recent empirical evidence demonstrates that emotional intelligence is not merely a personality characteristic but a professional competency that directly influences career development. Emotional intelligence supports both objective and subjective career success.

Emotional intelligence supports objective career success by improving how people perform in demanding work settings.

Emotional intelligence contributes :

[1] Improves Workplace Performance
[2] Enhances Communication Skills
[3] Supports Leadership Development
[4] Promotes Teamwork and Collaboration
[5] Helps in Stress Management
[6] Increases Adaptability to organizational changes and new environment
[7] Enhances Professional Relationships
[8] Improves Decision-Making
[9] Contributes to Promotions and Recognition
[10] Strengthens Job Stability and Career Advancement

Emotional intelligence is also a strong predictor of subjective career success, as it enhances an individual's ability to understand and manage emotions, build positive workplace relationships, and cope effectively with stress and challenges. It contributes to higher job satisfaction, improved work–life balance, greater motivation, and a positive self-perception of career achievement. Individuals with high emotional intelligence are more adaptable, resilient, and confident, which enables them to experience a deeper sense of fulfilment and personal success in their careers.

Emotional intelligence contributes:

- Enhances Job Satisfaction
- Promotes Emotional Well-being
- Improves Work-Life Balance
- Increases Self-Confidence
- Supports Positive Workplace Relationships
- Encourages Career Fulfillment
- Strengthens Motivation and Commitment
- Enhances Adaptability and Resilience
- Reduces Workplace Conflict
- Promotes Psychological Satisfaction.

Practical Implications

Emotional Intelligence has important practical implications in educational, organizational, and professional settings. In the contemporary workplace, emotional competencies are increasingly recognized as essential for improving performance, leadership, adaptability, and overall career development.

Implications for **Educational Institutions**

Educational institutions play a major role in preparing students for future careers. Developing emotional intelligence among students can improve academic adjustment, interpersonal relationships, and career readiness. This can be through:

- Incorporating emotional intelligence training into curricula
- Conducting workshops on stress management and communication skills
- Providing career counseling and emotional support services
- Encouraging teamwork, leadership activities, and group discussions
- Promoting self-awareness and self-reflection among students

For **Organizations:**

- EI should be integrated into selection, promotion, and leadership pipelines: hiring and promotion decisions that weigh EI dimensions (self‑awareness, empathy, relationship management) alongside technical skills yield managers who build stronger teams, reduce conflict, and foster higher engagement.
- Targeted EI training (e.g., feedback cultures, active listening, emotional regulation under stress) can be embedded in mid‑career and leadership programs to improve communication, decision‑making, adaptability, and change management.
- EI‑based coaching can help high‑potential employees navigate managing up and boundary‑spanning roles, turning ambition into visible, sustainable career gains rather than burnout.

For **Individuals** and **Professionals:**

- Cultivating EI (regular self‑reflection, seeking feedback, practicing empathy and stress management) becomes a career‑enhancing capability: it improves how others perceive competence, trustworthiness, and leadership potential.
- Emotionally intelligent professionals are better positioned to interpret organizational politics, negotiate opportunities, and build relational capital that translates into sponsorships, promotions, and lateral moves.
- High EI also protects well‑being (reducing emotional exhaustion), which sustains long‑term career momentum and resilience in high‑pressure or hybrid environments.

A case-based explanation makes this idea easier. Consider a corporate office where employees repeatedly complained about insufficient space, poor facilities, and an unresponsive work environment. The CEO, however, refused to engage with their

concerns and mentally detached himself during discussions. Although he may have been competent in business management, his lack of empathy and emotional awareness created dissatisfaction among employees. Over time, this led to declining morale, reduced commitment, and turnover. The case shows that career and organizational success are not determined only by authority or technical knowledge. A leader must also understand people's feelings, acknowledge concerns, and respond with emotional maturity. Had the CEO used emotional intelligence, he could have listened actively, validated the employees' experiences, and taken practical steps to improve the situation. Even if immediate solutions were difficult, respectful communication alone would likely have reduced frustration and preserved trust.

This case illustrates a broader truth that is Emotional Intelligence turns potential conflict into constructive problem-solving. When people feel heard, they are more willing to cooperate, even in difficult conditions. In contrast, when emotions are ignored, even a strong organization can suffer from low engagement and poor retention. That is why emotional intelligence is not simply a soft skill; it is a professional strength with real consequences. It shapes how leaders lead, how teams' function, and how individuals grow in their careers.

Another practical example can be seen in a young employee working in a team project. Suppose the employee receives criticism from a supervisor about errors in a presentation. A person with low emotional intelligence might feel insulted, become defensive, or blame others. This reaction can damage the relationship with the supervisor and reduce future trust. A person with high emotional intelligence, however, would likely listen carefully, ask clarifying questions, and use the feedback to improve the next presentation. Over time, this response builds a reputation for maturity, reliability, and professionalism. Such a reputation is often more valuable than one perfect performance because employers appreciate workers who can grow from feedback.

The value of emotional intelligence can also be seen in ordinary day-to-day work situations. For example, an employee may receive criticism from a manager for mistakes in a report or presentation. A person with low emotional intelligence may react defensively, feel insulted, or blame others. This can worsen the relationship with the manager. A person with high emotional intelligence, however, will listen calmly, ask questions to understand the feedback, and use it as an opportunity to improve. This response shows maturity and professionalism. In healthcare, teaching, sales, management, and many other professions, emotional intelligence is equally important. A doctor who understands a patient's fear can communicate more effectively. A teacher who senses that a student is discouraged can provide support. A salesperson who reads

the mood of a client can adjust the conversation better. In each of these cases, emotional intelligence improves outcomes and strengthens relationships.

The article “Emotional Intelligence as a Catalyst for Career Success” can therefore be understood through both theory and practice. Theoretically, emotional intelligence supports self-awareness, empathy, social skills, motivation, and self-control. Practically, these qualities help individuals handle pressure, communicate effectively, resolve conflict, and lead others. The case of the insensitive CEO demonstrates how a lack of emotional intelligence can weaken trust and damage professional outcomes. On the other hand, a person who applies emotional intelligence is more likely to build strong relationships, earn respect, and advance in a stable way.

Strategies to develop Emotional Intelligence for career success

Emotional intelligence can be developed through regular practice and reflection. Other strategies include:

- Building Self-awareness : Individuals should regularly analyze their emotions, behaviors, strengths, and weaknesses to improve self-awareness. This can be done by noticing emotional triggers, keeping a journal, and reflecting on situations that led to strong reactions. When a person understands what causes stress, anger, or anxiety, it becomes easier to manage those feelings before they affect behavior. Self-awareness is the foundation of emotional growth because people cannot improve what they do not recognize.
- Strengthening Self-Regulation: it includes managing stress through healthy routines such as sleep, exercise, and time management. These habits create emotional balance, which helps people stay professional and productive in demanding situations.
- Active Listening : Listening attentively to others helps develop empathy and communication skills. Asking thoughtful questions, paying attention to body language, and trying to see a situation from another perspective helps to improve these skills. Emotional intelligence becomes visible in the way a person speaks, listens, and handles disagreement. Respectful feedback, calm discussion, and careful word choice all reflect emotional maturity. Practicing these behaviors in everyday work situations helps a person build trust and become more effective in collaboration.
- Stress Management Techniques: Practices such as meditation, relaxation exercises, and time management can improve emotional regulation.
- Interpersonal Skill Development: Participating in group activities, discussions, and leadership opportunities enhances social skills and teamwork abilities.

- Emotional Intelligence Training : Educational institutions and organizations can provide workshops and training programs to strengthen emotional competencies.

  Emotional intelligence is a major catalyst for career success because it improves the way people think, feel, communicate, and lead in professional life. It helps individuals manage stress, adapt to change, resolve conflict, and build strong relationships. It also supports leadership effectiveness, teamwork, and career advancement. In a workplace where human interaction is constant, emotional intelligence is not a soft extra; it is a core professional strength

A more **critical discussion** must also consider the limits of Emotional Intelligence. Emotional Intelligence cannot alone determine Career Success. Career success depends on structural conditions such as educational background, social networks, organizational hierarchy, and economic opportunity. A person may have excellent emotional intelligence but still face barriers because of lack of access or unfavorable working conditions.

Another limitation is that Emotional Intelligence is often easier to identify than to measure. Many workplace discussions rely on vague ideas of being good with people or understanding emotions. This can make the concept attractive but also imprecise. Some people may appear emotionally intelligent because they are agreeable or socially confident, but this does not always mean they make ethical, effective, or fair decisions. In fact, emotional skill can sometimes be used strategically to influence others without genuine care for their well-being.

There is also the risk of overemphasizing emotional intelligence at the expense of technical skill. In many professions, competence remains essential. A doctor, engineer, accountant, or researcher cannot succeed on emotional awareness alone. They need knowledge, accuracy, and performance. Emotional intelligence may improve how they work with others, but it does not substitute for expertise. The most realistic interpretation is that emotional intelligence enhances professional effectiveness when it is combined with other forms of ability.

Conclusion

Emotional intelligence has emerged as a crucial factor influencing both the objective and subjective dimensions of career success in the contemporary professional world. Individuals with high emotional intelligence are better equipped to manage workplace challenges, maintain healthy professional relationships, and adapt effectively to changing work environments. These competencies not only enhance professional performance and employability but also promote psychological satisfaction and

personal growth. In today's competitive and rapidly evolving workplace, technical skills alone are insufficient for long-term career success; emotional and interpersonal competencies are equally important for sustaining professional excellence and overall well-being.

Therefore, the development of emotional intelligence should be considered an essential component of career development programs in educational institutions and organizations. Training, counselling, and experiential learning opportunities can help individuals strengthen their emotional competencies and prepare for successful professional lives. Overall, emotional intelligence plays a vital role in achieving balanced, meaningful, and sustainable career success.

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Chapter 50: The Male Gaze and Visual Grammar in Sri Lankan Teledrama: A Psychoanalytic Reading of *Thathparayak Denna*

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Abstract

This study examines the visual grammar of the Sri Lankan teledrama *Thathparayak Denna* (Independent Television, 2023–2024), focusing on how aesthetic and technical elements construct meaning, shape audience perception, and reproduce cultural values, particularly in relation to gender, identity, and representation. Situated within media representation discourse, the research adopts a psychoanalytic approach grounded in Laura Mulvey's Male Gaze theory and follows a qualitative case study methodology, combining content analysis of selected episodes with semi-structured interviews and thematic analysis to identify recurring visual patterns. The findings reveal that although the teledrama foregrounds multiple female narratives, its visual grammar largely reinforces patriarchal modes of representation through objectification, passivity, and aestheticization of women, shaped by both cultural norms and commercial imperatives aligned with audience expectations. The study concludes that visual grammar in *Thathparayak Denna* not only reflects but actively reproduces dominant gender ideologies within the contemporary Sri Lankan context, demonstrating the value of psychoanalytic frameworks in critically interpreting television texts.

Key words: Visual Grammar, Male Gaze Theory, Psychoanalysis, Cultural Representation, Sri Lankan Teledrama

Introduction

Television teledramas mark an important stage in visual production, where visual media continuously engage with humans by using visual grammar to influence everyday emotions, desires, and fears. Human beings have developed visual grammar to a highly sophisticated level. In teledrama production, both aesthetic expression and technical execution are achieved through the deliberate manipulation of this visual grammar. Scholars studying visual grammar within the television teledrama genre approach the subject from diverse perspectives, including social, economic, political, aesthetic, and psychoanalytical viewpoints. This research, which is conducted on the visual grammar of Sri Lankan teledrama productions, was conducted through a psychoanalytic subject approach. Accordingly, the aim of the research is to analyze, "What are the potentialities of the visual grammar of the teledrama "Thatthparam Denna" broadcast on Independent Television Network during 2023 - 2024, using Laura Malvi's theory of the male gaze?" The visual grammar of the teledrama "Thathparayak Denna", which won 10 Sumathi Awards in 2025, is studied here as a case study. Laura Mulvey's theory of the male gaze was developed in a 1975 article on visual pleasure, The Visual Pleasure of the Camera, published in the British journal The Journal Based on the psychoanalytic theories of Sigmund Freud (1856–1939) and Jacques Lacan (1901–1981). Malvi explained that "women are depicted on the screen as subject to the male gaze." Malvi recognized that this theory was also suitable for the study of the visual grammar of television dramas because it was an existing theoretical approach to the construction of visual pleasure. Visual grammar also creates visual pleasure through aesthetic and technical behavior. The research problem focuses on analyzing the visual grammar of the Sri Lankan teledrama *"*Thathparayak Denna*"* using Laura Mulvey's Male Gaze theory. This theory is a key framework in international visual media studies, examining how visual pleasure is constructed through a male perspective. Sri Lankan teledramas remain highly popular in 2025 and play a significant role in shaping public perceptions of gender roles, morality, and social values. Despite the large number of dramas produced annually and their wide audience reach, there is a clear research gap, as *"*Thathparayak Denna*"* has not yet been analyzed through a psychoanalytic approach to its visual grammar. This research aims to achieve the following research objectives.

1. To examine the visual grammar of the teledrama *"*Thathparayak Denna*"* in detail and analyze how it constructs meaning. The visual grammar will analyze the portrayal of women and men, the perspective of male characters in the story of Mulvey's theory, the perspective of the male director behind the camera, the man/non-active woman, visual pleasure and sexual objectification using the concepts of:

2. To analyze the socio-cultural interpretations of the female characters in the teledrama *"*Thathparayak Denna*"* in relation to Malvi's theory of the male gaze using visual grammar.

3. To evaluate the ways in which the teledrama *"*Thathparayak Denna*"* reinforces or challenges patriarchy in Sri Lankan television culture using visual grammar.

The present study is guided by a set of research questions designed to explore the role of visual grammar in shaping meaning within the teledrama *"*Thathparayak Denna*"* Specifically, this research seeks to identify the main features of visual grammar employed in the teledrama and examine how these elements contribute to the portrayal of male and female characters. Furthermore, the study investigates the relationship between visual grammar and Laura Mulvey's theory of the male gaze, with particular attention to how visual techniques construct gendered perspectives. Fianally, the research explores whether and how the teledrama reinforces or challenges patriarchal ideologies within the context of Sri Lankan television culture through its use of visual grammar.

Literature review

Among the existing research on Sri Lankan teledrama, studies by Bandara (2023, 2024) and Jinasena (2024) examine the field from industrial, aesthetic, and social perspectives. Bandara (2023) outlines the historical development of Sri Lankan teledrama and introduces the concept of "Quality Teledrama," focusing on narrative structure, production processes, and institutional transformations. However, this work pays limited attention to how visual elements function as meaning-making devices. Similarly, Jinasena (2024) evaluates the artistic quality and social impact of teledramas, demonstrating how they influence public sentiment and cultural values. Yet, these analyses remain largely descriptive, with insufficient exploration of the psychological and emotional mechanisms through which visual grammar shapes audience perception.

Consequently, a clear research gap emerges: the lack of an integrated framework that connects visual grammar with psychoanalytic interpretation. This study addresses that gap by examining how visual techniques—such as imagery, camera work, and editing—operate not only at an aesthetic level but also at a psychological level, influencing viewer experience and meaning construction. In addition, broader critiques of Sri Lankan teledrama, including those by Senesh Bandara Dissanayake, emphasize the absence of clear classification systems for "quality" teledramas and highlight the need for analytical frameworks that account for both artistic and cultural value. While

such studies provide important industrial and policy-level insights, they do not sufficiently explain the internal mechanisms of visual meaning production, reinforcing the necessity of the present research.

The theoretical foundation for analyzing visual grammar is supported by several key scholars. Christian Leborg (2006) conceptualizes visual grammar as a systematic framework for understanding visual communication, arguing that images function as structured systems of meaning similar to linguistic grammar. This perspective is crucial in shifting analysis away from surface-level interpretation toward structured meaning-making processes. Jeremy Butler (2009) extends this approach into television studies by emphasizing stylistic analysis, particularly mise-en-scène, editing, and visual composition, areas often overlooked in favor of narrative or ideological readings.

Similarly, Gunther Kress and Theo van Leeuwen (2006), through their work *Reading Images: The Grammar of Visual Design*, provide a semiotic model that categorizes visual meaning into representational, interactive, and compositional dimensions. Their framework demonstrates how images construct social relations and power structures, making it particularly relevant for analyzing gender representation in teledramas. Complementing these approaches, Peacock and Jacobs (2013) highlight the importance of television aesthetics and style, showing how visual elements such as camera angles, editing rhythms, and mise-en-scène shape audience engagement and interpretation. Collectively, these works establish a strong conceptual and methodological base for understanding visual grammar as a system that produces meaning, rather than merely reflecting it.

The psychoanalytic dimension of television studies further deepens this analysis. Carol and Sarah's (2023) *Psychoanalysis and the Small Screen* explores how television functioned as a psychological space during the COVID-19 pandemic, using qualitative content analysis within a Lacanian framework. The study demonstrates how television mediates unconscious desires, anxieties, and identity formation, positioning the "small screen" as a site of psychological negotiation. This highlights the broader role of media not just as representation, but as an ակտիվ participant in shaping emotional and subconscious experiences.

In a similar vein, the study *Game of Thrones: A Psychoanalytic Interpretation of Modern Television Series* (2018) examines how contemporary television narratives operate as platforms for collective psychological expression. Using Freudian concepts such as the superego, the research analyzes character complexity and emotional depth, concluding that modern television dramas play a significant role in constructing shared

social moods. Rather than treating narrative and psychology as separate domains, this work underscores their interdependence within visual storytelling.

John Bainbridge's (2018) psycho-cultural perspective further bridges television and psychoanalysis by examining how media content shapes perceptions of authority, sexuality, and social identity. Using qualitative methods such as case studies and discourse analysis, the study demonstrates how television reflects and reinforces cultural and psychological structures. This reinforces the argument that television must be understood as both a cultural and psychological medium, where meaning is constructed through layered interactions between text, audience, and context.

Additional studies extend psychoanalytic analysis into specific thematic areas. Levinson (2014), for instance, applies Lacanian theory to examine female representation in television melodrama, focusing on sado-masochistic tensions and internal psychological conflicts. Through textual analysis, the study reveals how female characters are constructed within complex emotional and symbolic frameworks, yet also highlights the lack of sustained psychological analysis in television studies.

Research on media influence, particularly on children, further illustrates the psychological impact of visual media. Using a mixed-method approach combining questionnaires and interviews, these studies draw on Bandura's social learning theory alongside Freudian and Lacanian perspectives to demonstrate how televised behaviors are imitated and internalized. The findings indicate that visual media significantly shapes attitudes, language, and behavioral patterns, particularly among younger audiences. However, there remains a notable lack of detailed, context-specific psychological analysis within the Sri Lankan setting.

Recent local studies also contribute to this discussion. The analysis of the Sinhala teledrama *Eya Den Bandala* (Nilar et al., 2023) employs textual and reception analysis to explore narrative structure, visual symbolism, and audience interpretation. The study highlights how gendered representations are constructed through narrative and visual techniques, particularly emphasizing the objectification and social positioning of female characters. While this research begins to address visual and gender dynamics, it does not fully integrate a psychoanalytic framework, leaving room for further exploration.

A crucial theoretical lens for this study is provided by Laura Mulvey's (1975) concept of the male gaze. Mulvey argues that visual media constructs women as objects of male visual pleasure within a patriarchal framework, positioning men as active agents and women as passive subjects. She identifies three dimensions of the gaze: the gaze of

characters within the narrative, the gaze of the camera (or director), and the gaze of the audience. This theory, grounded in psychoanalytic concepts such as scopophilia and voyeurism, provides a powerful tool for analyzing how visual grammar reinforces gendered power relations.

Mulvey's framework has been further expanded by scholars such as bell hooks, who introduced the concept of the oppositional gaze, challenging dominant visual ideologies and emphasizing alternative modes of viewing. Together, these perspectives highlight the importance of examining not only how images are constructed, but also how they are perceived and interpreted within specific cultural contexts.

In summary, while existing literature provides substantial insights into Sri Lankan teledrama, visual grammar, and psychoanalysis as separate domains, there is a clear lack of integrated analysis that connects these fields. Most studies either focus on industrial and aesthetic aspects without addressing psychological processes, or explore psychoanalytic themes without grounding them in visual grammar. Therefore, this research makes a significant contribution by synthesizing these approaches, offering a comprehensive framework to analyze how visual grammar in Sri Lankan teledramas constructs meaning, shapes audience perception, and reproduces socio-cultural and psychological realities.

Research Methodology

This study adopts a qualitative research design to explore the social, cultural, and psychological meanings embedded in Sri Lankan teledramas. Guided by an interpretivist paradigm, it assumes that reality is socially constructed and best understood through contextual interpretation. The research employs an analytical approach supported by hermeneutic principles, combining inductive and deductive reasoning to identify patterns and meanings in visual and textual data.Data were collected through qualitative content analysis and semi-structured interviews. A purposive sampling method was used to select 61 episodes of the teledrama *"Thatthparayak denna"* and 45 relevant screen frames, along with 12 interview participants. Thematic analysis was applied to interpret the data, focusing on visual grammar and psychoanalytic meanings using Laura Mulvey's Male Gaze Theory.Ethical standards were strictly followed, including informed consent and respect for intellectual property. The study focuses on mise-en-scène, composition, and characterization to analyze visual and ideological constructions within the selected teledrama.The research is purely qualitative, emphasizing interpretive and psychoanalytic analysis rather than quantitative measurement. It examines visual and

narrative meaning through selected scenes, camera techniques, character representation, and related interview data.

Research Analysis

The data collected through content analysis and interview analysis have been collected and discussed through thematic analysis.

Content Analysis

In this section, the main themes, sub-themes and their theoretical relationships identified through content analysis of selected teledrama scenes are analyzed. The analysis is discussed in relation to the male gaze theory and the visual grammar of Mise-on-scene.

Theme 01 - Gender power dynamics

Theme 02- Narrative framing and audience positioning

Scenes 4.1.2, 4.1.4, 4.1.6, 4.1.8, 4.1.13, 4.1.15, 4.1.17, 4.1.18, 4.1.19, 4.1.20, 4.1.21, 4.1.22, 4.1.23, 4.1.30, 4.1.31, and 4.1.32 were analyzed under the concept of the male gaze, particularly focusing on the notion of *"to-be-looked-at-ness."* This concept explains how women are constructed as visual objects to be looked at by others. Accordingly, within the traditional representational framework, female characters are portrayed as objects of visual pleasure and attraction, emphasizing their appearance and bodily display. Out of the total 45 visual samples analyzed through qualitative content analysis, 16 images were identified as relevant to this theme. These were further analyzed in detail, and the findings were categorized under five (05) sub-themes.

Sub-theme 1 – Passive female portrayal
Sub-theme 2 – Dominant male framing
Sub-theme 3 – Viewer alignment
Sub-theme 4 – Character perspective control
Sub-theme 5 – Patriarchal narrative

This visual frame was selected from a particular scene in the teledrama *"Thathparayk Denna"* In this shot, a close-up of the female character (the character "Poojani" in *"Thathparayk Denna"* is established. The use of the close-up shot emphasizes her facial expressions and emotional state, while simultaneously constructing her as an

object of visual attention.Through this framing, the shot reflects a visual construction shaped by the collaboration between the male director and the camera operator, aligning with the principles of the male gaze. In the development of the character, the framing positions the female character in a way that directs attention toward her appearance and emotional display, reinforcing her role as a visual subject to be observed.The dialogue in this scene further strengthens this construction, as it directs attention toward emotional vulnerability and aesthetic presentation:

"Don't say that… now everything is over…
There is nothing left to hold on to in life…
There is no place for love anymore…
No… there is nothing…
There is no meaning in going back…
There is a beautiful song…"

(*Felix – "Thathparayk Denna" teledrama*)

From a psychoanalytic perspective, this visual frame can be interpreted in relation to Laura Mulvey's theory of the male gaze. The scene demonstrates how visual composition, performance, and dialogue work together to construct meaning, allowing for deeper critical discussion based on psychoanalytic interpretation.

To-be-looked-at-ness and the Male Gaze

The concept of **"to-be-looked-at-ness"** (Mulvey) explains how visual media constructs women as objects primarily meant to be seen. In the selected scene from *Thatthparayak denna*, close-up shots of the female character emphasize her facial expressions, tears, and emotional vulnerability, making her the central visual focus. This framing reduces her narrative agency and presents her as a figure for visual consumption rather than an active driver of the story.

By minimizing broader context and foregrounding emotional display, the scene aligns the viewer with a male-centered perspective, positioning the female character as an object of scopophilic pleasure. Her identity is thus shaped more by emotional and visual appeal than by narrative action, reinforcing passive female representation.

This construction is further strengthened by male creative control within production, where directing, scripting, and cinematography collectively shape her as an object to be looked at. As Mulvey argues, the female figure is split between **active/male** and **passive/female** positions, with the latter constructed for visual pleasure and desire.

Repeated exposure to such representations leads to the internalization of the male gaze, where viewers may unconsciously adopt the same perspective. From a psychoanalytic view, this also reflects self-objectification, where women are encouraged to perceive themselves through this gaze.

In terms of **mise-en-scène**, character placement and framing reinforce power relations. The male character is often positioned with narrative dominance, while the female character remains visually prominent but narratively passive. Even when centered in the frame, she is constructed as reactive rather than active, reinforcing her role within a visually coded power hierarchy.

In addition, frame positioning can place characters either at the center or at the periphery (frame edges). According to Sikov's concept of *mise-en-scène*, this positioning acts as a visual mechanism that transfers narrative power toward the male character. This aligns with Mulvey's three levels of the male gaze: the gaze of the male character, the gaze of the male filmmaker, and the presumed gaze of the spectator. Power dynamics are therefore visually constructed through spatial composition.

Furthermore, within this visual arrangement, the placement of characters, objects, and camera positioning—referred to as *blocking*—along with spatial organization in mise-en-scène, creates an *unbalanced power-space*. This imbalance reinforces both Sub-theme 2: Dominant Male Framing and Sub-theme 1: Passive Female Representation within the same scene. This pattern was consistently observed across a large number of scenes within the total 61 episodes analyzed.

Within visual composition, there is also a meaningful distinction between *foreground* and *background*. According to Gunther Kress and Theo van Leeuwen (2006, p. 48), elements placed in the foreground are perceived as the most important (primary information) and attract the viewer's attention, while background elements provide contextual support and are considered less significant. In other words, the foreground represents the main or most important information, while the background functions as supporting context.

"What is placed in the foreground is presented as the most salient, the most important part of the information; what is placed in the background is presented as the least salient, as the context for what is in the foreground" (Kress & van Leeuwen, 2006, p. 48).

Accordingly, this study's qualitative content analysis also identified that foreground and background positioning play a crucial role in directing viewer attention and

constructing meaning. The placement of elements within the frame controls visual attention, salience, and informational hierarchy, thereby contributing to the overall interpretation of the scene.

Composition and Blocking

The male character is positioned prominently in the foreground. His placement in front directs the viewer's attention toward him and establishes his dominance at the beginning of the narrative. The female character is positioned behind him, and this spatial arrangement further strengthens his controlling and authoritative role.The vertical arrangement of their bodies contributes to vertical framing**,** which visually reinforces the male character's leadership and dominance, while the female character is positioned as subordinate. This compositional structure clearly reflects the power hierarchy between the characters through mise-en-scène.

Actors' Performance

The performance of the male character is confident and dominant, as he moves forward with authority. His body language reinforces his control over the narrative and his relationship with other characters. In contrast, the female character follows behind him in a submissive and restrained manner. Her quiet and reactive movement reflects what Laura Mulvey describes as *passive positioning*.

This representation also aligns with the concept of *to-be-looked-at-ness*, where the female character is constructed as a visual object intended to be observed rather than as an active agent within the narrative.

Actors' Performance

In Figures 4.1.6 and 4.1.7, the male character's facial expressions and body language clearly convey attention, dominance, and narrative control. His posture and gaze toward the female character are **power-coded**, reinforcing his authority. In contrast, Figure 4.1.8 shows a shift where attention, dominance, and narrative control are momentarily associated with the female character, whose posture and gaze also appear power-coded.

Spatial Dominance

In Figures 4.1.6 and 4.1.7, greater spatial allocation is given to the male character (particularly on the right side of the frame). The female character is confined to the left margin, visually suggesting her **social, psychological, and representational limitation** through *confined framing*. She is positioned toward the edge of the frame, reinforcing her marginal status.

This aligns with Laura Mulvey's argument that the male character is represented as active, while the female is constructed as passive and reactive.In contrast, Figure 4.1.8 presents a reversal, where more space is allocated to the female character, while the male character is pushed toward the edge of the frame.

Representation of the Female Character

In the first two images, the female character faces the male character but maintains a **reactive posture**, reinforcing her passive role. This reflects Mulvey's notion that women are positioned as non-active figures within the narrative.

In the third image, a shift in power is observed, where the female character gains relative narrative proximity and authority, appearing closer to a position of control within the scene.

Female Agency vs Male Gaze (Short Version)

An alternative reading challenges Mulvey's theory by highlighting instances of **female agency and autonomy**, where women take active roles, make decisions, and resist traditional social norms. These representations suggest an attempt to challenge patriarchal structures and reshape audience perception. However, this creates a tension within the narrative between empowerment and continued subordination.

Camera Framing and Equality

Eye-level shots (Figures 4.1.2, 4.1.3, 4.1.4) create a sense of visual equality between male and female characters by using parallel framing. However, even in these balanced compositions, elements of **mise-en-scène** such as costume, lighting, and body language continue to position the female character as an object of visual attention, maintaining aspects of the male gaze.

Scopophilia and Objectification

The analysis also reflects Mulvey's concepts of **scopophilia** and visual pleasure, where the act of looking becomes a source of pleasure tied to the sexualization of the female body. The female figure is constructed as a site of visual desire, reinforcing male-centered viewing practices. As Mulvey (1975) states, the female character "plays to and signifies male desire."

Psychoanalytic Dimensions

Drawing on **Freud's psychoanalytic theory**, concepts such as castration anxiety help explain how unconscious fears are managed through visual representation. In this context, mechanisms like **fetishistic scopophilia** (idealizing the female body) and **voyeurism** (positioning women as objects of observation) contribute to the sexualization and objectification of female characters.

The fragmentation of the female body through close-ups (eyes, lips, hair) reinforces this process, reducing women to visual erotic objects. Cinematic techniques such as close-ups, insert shots, lighting (high-key, low-key, chiaroscuro), and color symbolism further construct the female body as an object of desire, intensifying the male gaze.

Recurring bathing scenes and intimate settings present the female body as a spectacle, reinforcing **to-be-looked-at-ness** and fetishistic scopophilia. From a **Foucaultian perspective**, these scenes also reflect a disciplinary gaze where the female body is regulated, observed, and controlled through visual power structures.

Mise-en-scène elements such as bathrooms, bedrooms, mirrors, and confined spaces create intimacy and voyeuristic tension, while also reinforcing the female body as an object of visual consumption. Physical interactions and domestic settings further reflect traditional gender hierarchies, positioning women as subordinate and men as dominant.

Even female authority figures are visually framed within male-coded power structures. Additionally, make-up and performance often emphasize emotional vulnerability, reinforcing the female body as a site of visual display rather than narrative agency.

Interview Analysis

In Section 4.2, data from 12 purposively selected participants were analyzed using thematic analysis (Braun & Clarke, 2006). Semi-structured interviews provided in-depth insights, which were coded into key themes and sub-themes aligned with the research objectives.

The findings reveal a tension in the representation of female characters and the director's perception of women. On one hand, female roles are constructed as empowering, portraying women as independent and decision-making individuals who challenge social norms. On the other hand, at the early narrative stages, women are positioned as subordinate to create dramatic tension and later transition into more active roles to sustain audience engagement.

This dual representation aligns with Laura Mulvey's Male Gaze theory, where initial female subordination reflects patriarchal structures, while later empowerment attempts to challenge them. However, interview responses indicate that traditional male-dominated perspectives still significantly influence character portrayal, with some creators acknowledging the use of passive female roles for narrative impact.

The analysis also shows that mise-en-scène, visual composition, and narrative strategies reinforce gender hierarchies, with instances of scopophilic representation of women in visually charged scenes. At the same time, portrayals of female independence coexist with cultural norms that continue to normalize subordination.

Furthermore, class representation emerges through costume, appearance, and setting, often idealizing upper-class women as visually attractive and desirable. Overall, the findings highlight that commercial pressures and audience expectations strongly influence the commodification and visual construction of female characters in television drama.

Conclusions

The main finding of this study is that although the teledrama *"Thathparayak denna"* foregrounds several female characters, its visual and aesthetic construction is largely shaped by the male gaze. Through techniques such as dominant male framing, female objectification, and the positioning of women as objects of visual pleasure ("to-be-looked-at-ness"), the narrative reinforces patriarchal perspectives. Cinematic elements including close-ups, extreme close-ups, camera angles, spatial dominance, background arrangement, and character blocking further strengthen this male-centered viewpoint. Moreover, as a commercial television production, the teledrama is influenced by profit-oriented motives, resulting in the commodification of female characters. Although the narrative targets a female audience, women are visually constructed based on body shape, skin tone, and appearance, and are categorized into types such as weak/emotional and strong/independent, both of which remain objectified. Therefore, from a psychoanalytic perspective, it can be concluded that the

visual grammar of the teledrama is predominantly structured through the framework of the male gaze.

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Chapter 51:The Digital Productivity Paradox in Emerging Markets: ICT Deepening, Labor Share Polarization, and Structural Distributional Thresholds

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Abstract:

Utilizing a balanced panel dataset across 12 emerging economies from 1995 to 2024, this chapter investigates the structural determinants of GDP per capita growth, focusing on the empirical interplay between technological advancement, human capital accumulation, income polarization, and trade. Key findings reveal two notable structural anomalies within the contemporary Global South: a non-linear inequality trap and a persistent digital productivity paradox. Firstly, the relationship between household income concentration and GDP exhibits an inverted U-Shaped Curve. Secondly, digital deepening exerts a positive impact on economic growth. This suggests that mere access to basic network connectivity is insufficient to foster development without institutional support. Furthermore, this paradox is exacerbated by capital technological change, which reduces labor's share of income by prioritizing capital accumulation over labor wages. Consequently, this dynamic intensifies the distributional mechanisms that perpetuate inequality within these economies. Conclusively, this study outlines targeted policy frameworks designed to mitigate these structural distortions and foster inclusive macroeconomic development across the sampled economies.

Keywords: Digital Productivity Paradox; ICT Deepening; Inequality Trap; Emerging Markets; Global South.

Classification JEL: O33, O47, D33, C23.

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1. Introduction

Historically, the economic trajectories of developing nations in the Global South were fundamentally determined by capital accumulation, technological diffusion, and the functional distribution of income. Recently, the transition toward digitalized economic systems has fundamentally challenged traditional distribution paradigms. While classical frameworks assumed that technological integration would naturally benefit all socio-economic segments, contemporary dynamics suggest a different structural trajectory. This labor displacement dynamic is deeply rooted in the framework of Skill-Biased Technological Change (SBTC). As theorized by Acemoglu and Restrepo (2018), automation and ICT deepening modify the functional distribution of income by creating a powerful displacement effect, where capital-intensive technologies substitute traditional labor tasks and depress middle-income wages. Empirically, this shift has led to a global contraction of the labor share, a structural polarization extensively documented by Dao et al. (2019), who demonstrate that the rapid adoption of digital assets significantly lowers the relative cost of investment goods, thereby accelerating capital accumulation at the expense of total wages in developing nations. This empirical reality heavily aligns with the global evidence provided by Karabarbounis and Neiman (2014), who observed a widespread decline in the global labor share and attributed it to the decreasing relative price of investment goods driven by rapid technological advancements. This divergence clarifies the mechanics underlying the digital productivity paradox, wherein extensive network deployment fails to yield aggregate total factor productivity gains. Although technological diffusion occurs rapidly, its macroeconomic returns are neutralized by institutional rigidities and a structural lag in human capital accumulation.

Consequently, mere digital connectivity is insufficient to catalyze economic growth in the absence of complementary educational reforms and institutional adaptation. This friction illustrates the classic 'race between education and technology' conceptualized by Goldin and Katz (2008), which posits that technological returns stall and fuel inequality when the formal education system fails to supply higher-order skills at a pace that matches technological innovation. Currently, the structural distribution of income within emerging economies is undergoing profound polarization. Digital modernization exhibits a highly non-linear relationship with economic inequality, generating path-dependent feedback loops that exacerbate distributional disparities. Initial asset concentration may facilitate early-stage growth by optimizing capital accumulation and mobilizing corporate savings. However, once income inequality breaches critical structural thresholds, it severely impedes long-term macroeconomic momentum. Extreme inequality contracts aggregate domestic demand due to the lower

marginal propensity to consume (MPC) characteristic of high-income cohorts. Concurrently, it induces a misallocation of human capital across society, as capital market imperfections and binding credit constraints restrict educational access for low-income households. This specific transmission channel operates the seminal macro-model of Galor and Zeira (1993), which demonstrated mathematically that when credit markets are imperfect, high initial inequality permanently traps individuals in low-skilled occupations, thereby dampening aggregate long-term growth.

Furthermore, digital expansion alters the occupational structure by enhancing the productivity of high-skilled professionals while displacing medium-skilled workers engaged in routine tasks. As automation capitalizes on steady, predictable employment segments, labor compensation accounts for a diminishing share of the aggregate national output. Consequently, skill-biased technological change induces a functional redistribution of income, characterized by an increasing capital share to the detriment of labor compensation. These asymmetric returns establish cumulative, path-dependent advantages, trapping developing nations within widening socioeconomic disparities.

Crucially, the distributive consequences of technological innovation dictate whether developing nations experience convergent growth or structural fragmentation. Utilizing rigorous quantitative panel data econometrics, contemporary research identifies critical non-linear inflection points where these structural regimes shift. These empirical insights are vital for formulating evidence-based policy frameworks capable of transforming rudimentary digital access into sustained, inclusive total factor productivity growth.

2. Literature review

This section synthesizes the existing theoretical and empirical literature regarding the complex interactions between digital transformation, functional income distribution, and macroeconomic growth in emerging market economies. Drawing upon foundational studies, this section examines the mitigating factors of digital returns and structural wealth polarization. This synthesis establishes the analytical baseline for the subsequent empirical investigation. Despite accelerated technological dispersion, particularly in artificial intelligence, aggregate macroeconomic growth has remained comparatively stagnant, a phenomenon conceptualized as the digital productivity paradox (Autor, 2022; Tan, 2025). The Asymmetric Digital Dividend Theory explicates this phenomenon through four distinct mechanisms: market concentration, labor displacement, measurement bias, and consumption constraints (Tan, 2025). First, digital architecture fosters monopolistic structures, allowing market leaders to appropriate disproportionate rents. Second, automation generates a persistent

displacement effect that suppresses labor compensation. Third, conventional accounting metrics, such as GDP, fail to capture the non-monetized consumer surplus generated by digital services. Lastly, rising income inequality dampens aggregate demand, further curtailing growth potential. This transitional phase is consistent with evolutionary economic theories, which suggest that macroeconomic productivity gains remain latent until technological deployment is matched by structural and organizational realignment (Van Ark, 2016). Significant labor market realignments are driven by the systematic automation of routine-intensive tasks. While high-skilled occupations expand due to technology-complementary cognitive advantages, mid-level positions undergo steady contraction under persistent automation pressures. This polarization progressively hollows out stable middle-income careers over time. Algorithmic platforms fragment employment into micro-tasks managed via remote interfaces. Consequently, workers operating within this gig economy are frequently excluded from the structural social benefits traditionally associated with standard full-time employment contracts. Empirical evidence indicates that while digital instruments continuously augment gross economic output, these advancements simultaneously introduce structural fragmentation when initial exposure remains highly asymmetrical across socio-economic strata. Affluent households' appropriate digital technologies at an accelerated pace, thereby exacerbating income polarization. Consequently, persistent distributional inequalities obstruct the diffusion of technological dividends to lower-income segments, ultimately trapping the economy in a low-growth equilibrium. Concomitantly, market rents accrue disproportionately to capital owners and dominant platform-based enterprises, intensifying market concentration. Nevertheless, empirical evidence underscores the pivotal role of institutional frameworks in determining whether technological innovations exacerbate or mitigate income polarization. Effective institutional leadership ensures more equitable outcomes, facilitating a broader distribution of macroeconomic gains derived from technological advancements (Dossou et al., 2023; Xiao et al., 2025). For countries building up their economies, the deployment of capital-augmenting technologies poses structural risks to emerging economies, which face the dual challenge of fragile domestic institutions and rapid external technological shifts, low-cost labor-intensive jobs may disappear prematurely (Mandalika et al., 2026; Rodrik, 2016). These economies face a dual vulnerability: the interaction between fragile local structures and rapid external technological shifts often induces highly volatile digital growth (Mandalika et al., 2026). However, educational enhancements, market liberalization, and robust regulatory frameworks could optimize the returns on information and communication technologies in developing regions (Yong et al., 2024; Martins-Neto et al., 2024).

3. Data and methodology

This section explains the empirical approach devoted to evaluating the macroeconomic impact of digital deepening and distributional dynamics on per capita growth. Twelve developing countries are included in the analysis: Bangladesh, Bolivia, Brazil, Colombia, India, Indonesia, Kenya, Mexico, Morocco, Senegal, South Africa, and Vietnam. The empirical analysis relies on a strictly balanced panel dataset comprising annual observations spanning the period from 1995 to 2024. The empirical specification incorporates a select set of observable variables chosen for their theoretical relevance and capacity to capture the multifaceted nature of economic dynamics. To account for cross-country heterogeneity, we place particular emphasis on digital diffusion, proxied by the internet penetration rate, which reflects the extent of technology adoption across economies. Income inequality is explicitly captured through the Gini coefficient to account for intra-country distributive disparities. Additionally, productivity dynamics enter the model via total factor productivity (TFP), measuring the efficiency with which labor and capital inputs are combined in the production process. The functional distribution of income is further integrated using the labor share, defined as the proportion of total output accruing to labor relative to capital. To ensure the robustness and consistency of the estimations, we include control variables. Human capital is proxied by an index reflecting educational attainment and skill accumulation within the workforce, while trade openness accounts for the degree of global economic integration. Including these controls mitigates potential omitted variable bias and enhances the model's overall explanatory power. Finally, the dataset is compiled from established international sources to ensure cross-country and temporal comparability. Core indicators are drawn from the World Bank's World Development Indicators (WDI), while complementary macroeconomic and productivity measures are obtained from the Penn World Table (PWT). A detailed description of the variables, including their definitions and statistical sources, is presented in Table 1.

Table 1: Variables descriptions

Variables	Description	Unit of Measurement	Source
GDP	Gross Domestic Product per capita	Constant currency units	WDI
GINI	Household Income Inequality Index	Scale from 0 to 100	WDI
ICT	Digital Deepening / ICT Penetration Rate	% of the total population	ITU
TFP	Total Factor Productivity	Index (Constant national prices)	PWT

LABOR	Functional Income Share of Labor	% of GDP	PWT
HC	Human Capital Index	Index scale based on years of edu	PWT
INF	Annual consumer price inflation rate	Annual Percentage Change (%)	WDI
TRADE	Trade Openness	(Exports+Imports)/GDP Ratios	WDI

Source: Author's compilation

4. Results and discussion

This section presents empirical findings derived from the methodological framework outlined above, as shown in Tables 2 and 3, which present the descriptive statistics and the correlation matrix. The real GDP per capita exhibits substantial cross-country variance, ranging from a minimum baseline of $620.56 to a maximum of $10,316.46. Such differences highlight varied economic structures across countries included. Because of this variation, the group studied reflects multiple stages of development, spanning from low-income to upper-middle-income economies. The empirical sample exhibits pronounced cross-country heterogeneities in both income inequality and functional distribution. The baseline data displays a mean Gini coefficient of 44.17, with multiple observations breaching the critical structural threshold of 51. Concurrently, the labor income share averages 45.77%, yet exhibits severe contractions dropping to 30.99% in specific jurisdictions. Such significant wage stagnation highlights acute macroeconomic imbalances regarding surplus value distribution. Concurrently, ICT penetration exhibits the highest volatility across the sample. While early-stage digital adoption begins at a negligible baseline of 0.07%, it accelerates exponentially to exceed 91%, reflecting highly asymmetric speeds of technological expansion across emerging markets. This rapid digitalization contrasts sharply with total factor productivity trajectories, which remain stagnant throughout the observed timeframe. The empirical disconnect—where capital-deepening outpaces human efficiency gains—empirically encapsulates the 'Digital Productivity Paradox', indicating that raw technological adoption does not automatically translate into systemic operational efficiency. In spite of quick uptake of digital technologies, improvements in system-wide productivity lag behind what is needed to push economic boundaries forward. Development patterns in broader macro indicators follow expected paths. Progress in education and skills builds gradually, reaching an average score of 2.28. Yet stability at the national level remains uneven. Sharp regional increases in prices emerge, seen most clearly when inflation hits 42.30%. Finally, the data shows strong worldwide connectedness, shown through a high average trade openness measure reaching 3.17. Still, the shape of some distributions - revealed by

kurtosis and asymmetry values - deviates from normal patterns, a finding backed up by Jarque-Bera test outcomes.

The correlation matrix values are examined: Income inequality (GINI) is positively correlated with human capital and ICT, suggesting the presence of skill-biased effects that may exacerbate disparities, while its negative association with total factor productivity (TFP) and trade openness indicates a potential equalizing role of productivity gains and globalization. Moreover, ICT is strongly and positively related to TFP, underscoring its importance as a driver of productivity, whereas inflation exhibits negative correlations with both ICT and TFP, reflecting the adverse effects of macroeconomic instability. Overall, the magnitude of the coefficients remains moderate, indicating the absence of serious multicollinearity issues, thereby allowing the variables to be included simultaneously in the estimation equation.

Using panel data methods helps uncover varied effects of broad economic forces and tech factors on growth patterns. Grounded in prior research, variable choices reflect clear alignment with the analysis goals. Once the dataset was built, the core statistical framework took its final shape. Following established practice, the model structure accounts for differing country-level dynamics across time.

Table 2: Descriptive statistics

	GDP	GINI	HC	INF	ICT	LABOR	TFP	TRADE
Mean	3778.251	44.166	2.279	5.852	31.488	45.765	0.196	3.17
Median	2713.125	40.78	2.39	5.22	23.96	45.645	0.179	3.116
Max	10316.46	64.75	3.078	42.3	91.2	55.94	0.692	4.541
Min	620.560	28.58	1.321	-4.62	0.07	30.99	-0.014	2.321
Std. Dev.	2846.361	9.275	0.483	5.287	26.775	5.409	0.138	0.47
J.B	47.356	24.727	19.355	2358.581	27.713	41.974	31.853	32.37
Prob	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Observations	300	300	300	300	300	300	300	300

Table 3:

Correlation matrix

	GINI	HC	INF	ICT	LABOR	TFP	TRADE

GINI	**1.000**						
HC	**0.551***	**1.000**					
INF	**0.059**	**0.141***	**1.000**				
ICT	**0.143***	**0.411**	**-0.203***	**1.000**			
LABOR	**0.060**	**-0.327***	**0.042**	**-0.085**	**1.000**		
TFP	**-0.410***	**0.177***	**-0.145***	**0.666***	**-0.108**	**1.000**	
TRADE	**-0.119***	**0.232***	**0.038**	**0.202***	**-0.326***	**0.253***	**1.000**

* Indicates statistical significance at 5%. Source: Author's computing

To establish the econometric validity and efficiency of the fixed-effects framework, a rigorous battery of panel diagnostic tests was systematically performed. First, multicollinearity was assessed using the Variance Inflation Factor (VIF), yielding a mean VIF of 2.49, well below the conservative threshold of 5. Second, cross-sectional dependence was evaluated via Pesaran's (2004) CD test, accepting the null hypothesis of cross-sectional independence (CD = 0.518, p = 0.6047). Third, stationary properties were confirmed at levels using both first- and second-generation panel unit root tests (Levin-Lin-Chu and Im-Pesaran-Shin). Finally, diagnostic testing identified the presence of groupwise heteroskedasticity and first-order serial correlation. To eliminate prospective bias and guarantee robust statistical inference, the final model parameters are estimated using Driscoll–Kraay standard errors.

Advanced panel data estimation techniques are employed to investigate the heterogeneous impacts of macroeconomic and technological determinants on economic growth. Informed by the literature review, variables were selected based on their direct relevance to the study's objectives. To evaluate the non-linear impact of income inequality alongside digital deepening and macroeconomic controls on economic performance, we specify a log-linear static panel data model. In line with empirical growth literature, the dependent variable is transformed into its natural logarithm to stabilize error variance and account for scale disparities across the sampled economies. The baseline specification is formulated as follows:

$$\mathbf{lnGDP_{it} = \beta_0 + \beta_1 GINI_{it} + \beta_2 GINI_{it}^2 + \beta_3 ICT_{it} + \beta_4 TFP_{it} + \beta_5 TRADE_{it} + \beta_6 HC_{it} + \beta_7 INF_{it} + \beta_8 LABOR_{it} + \mu_i + \delta_t + \varepsilon_{it}} \quad \textbf{(1)}$$

Where I (i=1,...,12) denotes the country, t (t=1995,…, 2024) represents the year. $lnGDP_{it}$:represents the natural logarithm of GDP per capita, $GINI_{it}$ signifies the Gini coefficient, and $GINI_{it}^2$ is its quadratic term included to capture potential non-linearities. ICT_{it} denotes information and communication technology penetration, TFP_{it}

represents total factor productivity, $TRADE_{it}$ is the trade openness ratio, HC_{it} measures human capital accumulation, INF_{it} controls for the inflation rate, and $LABOR_{it}$ represents the labor force participation rate. The terms μ_i and δ_t capture unobserved country-specific fixed effects and global time-specific shocks, respectively, while ε_{it} is the idiosyncratic error term.

The empirical estimation of the log-linear fixed-effects model yields the following quantified baseline relationship:

$$\begin{aligned}\widehat{\ln GDP}_{it} = {} & 0.883 + 0.204^{***}\,GINI_{it} - 0.002^{***}\,GINI_{it}^2 + 0.007^{***}\,ICT_{it} \\ & + 1.518^{***}\,TFP_{it} - 0.207^{***}\,TRADE_{it} + 0.732^{***}\,HC_{it} - 0.003\,INF_{it} \\ & - 0.074^{***}\,LABOR_{it} \quad (2)\end{aligned}$$

*** significant at 1%

Because the model follows a log-linear specification, the estimated coefficients represent semi-elasticities, measuring the relative percentage change in GDP per capita induced by a one-unit change in the explanatory variables:

- Human Capital and Macroeconomic Controls: Holding other factors constant, the coefficient for human capital ($\hat{\beta}_6 = 0.732$) implies that a one-unit increase in the HC index is associated with a 73.2% expansion in GDP per capita. In realistic terms, a standard deviation increases in the human capital index (SD = 0.15) yields an approximate 11% increase in economic output, validating the Lucas-type endogenous growth framework within the sampled emerging markets. Conversely, the negative and significant coefficient for trade openness indicates that a one-unit increase in the trade-to-GDP ratio contracts GDP per capita by 20.7%. The negative and highly significant impact of trade openness exposes a systemic structural fragility within the sampled emerging economies. This finding strongly aligns with Rodrik's (2016) premature deindustrialization thesis. When developing nations undergo rapid trade liberalization in the absence of a mature domestic industrial framework, direct exposure to highly competitive international markets often triggers a contraction in domestic manufacturing output. While this negative coefficient aligns with Rodrik's (2016) premature deindustrialization thesis, it also reflects the structural trade deficits prevalent in several sampled emerging markets. Unchecked trade openness in these regions often triggers an influx of high-value-added manufactured imports, displacing nascent domestic industries and locking the economy into low-productivity primary sectors. Consequently, this forces a premature structural shift of labor toward low-productivity primary goods

or informal service sectors, which ultimately suppresses long-term aggregate per capita wealth. Finally, inflation ($\hat{\beta}_7 = -0.003$) is close to zero and proves statistically insignificant. Within this empirical sample, transitory monetary shocks and nominal price fluctuations exert negligible long-term effects on growth trajectories, meaning that structural configurations remain the primary drivers. Concurrently, the labor force variable ($\hat{\beta}_8 = -0.074$) exerts a negative and significant impact, which aligns with the observed structural contractions in the functional labor income share under capital-augmenting technological change

- Non-linear Inequality Relationship: The marginal effect of income inequality on economic growth is obtained via the partial derivative of Equation (2) with respect to Gini: $\frac{\partial \hat{GDP}_{it}}{\partial GINI_{it}} = 0.204 - 0.004 * GINI$. The positive linear coefficient ($\hat{\beta}_1 = 0.204$) combined with the negative quadratic coefficient $\hat{\beta}_2 = -0.002$ formally validates a concave, inverted U-shaped relationship. Setting this derivative to zero yields the structural inequality threshold:

Estimation of Equation (2) reveals that income inequality exhibits a non-linear, inverted U-shaped relationship with macroeconomic growth in emerging economies. Specifically, an increase in household income inequality, as measured by the Gini coefficient, is initially associated with higher economic growth, and this first-order effect is statistically significant. However, the squared term of the inequality measure shows a negative and highly significant coefficient (at the 1% level), indicating that beyond a certain threshold, further increases in inequality exert a detrimental effect on growth.

This pattern is consistent with the theoretical framework proposed by Kuznets regarding the evolution of inequality during the development process. The turning point, the level at which additional inequality begins to hinder economic growth, is derived from the marginal effect of the Gini coefficient on GDP per capita. Empirical estimation identifies this threshold at a Gini value of approximately 51.

To isolate the precise empirical threshold where the growth-inhibiting effects of income concentration begin to dominate, we calculate the marginal effect of the Gini coefficient on real GDP per capita from the estimated fixed-effects model. Taking the partial derivative of Equation (2) with respect to the GINI variable and setting it to zero yields the following optimization.

$$\frac{\partial \hat{GDP}_{it}}{\partial GINI_{it}} = 0.204 - 2 * (0.002) * GINI_{it} = 0$$

$$\rightarrow Threshold\ GINI = \frac{-\beta_1}{2\beta_2} = \frac{-0.204}{2*(-0.002)} = 51 \quad (3)$$

The empirical validity of these outcomes is strongly underpinned by econometric specification tests; specifically, the results of the Hausman test (Baltagi, 2021) indicate that the fixed-effects model is the most appropriate framework, as recommended by Wooldridge (2010).

The rigorous determination of the most appropriate econometric specification between the Fixed Effects (FE) and Random Effects (RE) frameworks is guided by both structural considerations and statistical diagnostics. The Hausman test rejects the null hypothesis of no correlation between individual effects and regressors ($p < 0.05$), indicating that the Random Effects estimator is inconsistent. Accordingly, the Fixed Effects model is preferred as the most appropriate specification. This choice is further justified by the purposive nature of the sample (12 emerging economies), for which FE effectively controls unobserved, time-invariant heterogeneity and mitigates omitted variable bias. Consequently, it ensures consistent and reliable estimates, particularly for the nonlinear effects of income inequality (GINI, GINI²) and key macroeconomic variables (ICT, TRADE, TFP, HC, INF, LABOR).

Based on this robust specification, the mathematical derivation identifies a critical structural turning point at a Gini value of approximately 51. This finding implies that income concentration fosters capital accumulation and economic growth up to this threshold, beyond which further inequality severely restricts market size and stifles macroeconomic performance. Prior to reaching this critical tipping point, moderate income disparity can stimulate macroeconomic expansion, primarily by channeling resources toward high-saving economic agents and physical asset investments. This structural threshold and its underlying transmission channels strongly corroborate the empirical macro-framework established by Ostry et al. (2014). In their extensive cross-country analysis for the International Monetary Fund, the authors robustly demonstrated that high net inequality is not only systematically associated with slower economic growth but also severely undermines its structural sustainability over time, a dynamic validated by the exact credit constraints and aggregate demand contractions highlighted in our model.

Ultimately, these empirical insights robustly support the existence of both the digital productivity paradox and significant structural asymmetries in input elasticities across the investigated economic systems. Although results show a clear positive link with deeper digital integration, the effect remains small, hinting that access alone cannot drive growth without parallel improvements in governance and rules. The marginal impact of ICT infrastructure suggests that while network coverage has expanded rapidly across emerging economies, it primarily facilitates consumption-oriented digital activities rather than production-oriented applications. This outcome explicitly confirms the empirical presence of the digital productivity paradox within the Global South. It reveals that surface-level digitalization, such as expanding telecommunication infrastructure, mobile subscriptions, or broadband network lines, is entirely insufficient to trigger aggregate efficiency shifts on its own. This substantiates the macro-structural friction where capital deepening in technology fails to yield aggregate efficiency gains due to binding constraints in organizational adaptation, specialized managerial capabilities, and advanced technical skills. Consequently, without complementary investments in secondary and tertiary educational reforms, institutional transparency, and targeted high-skill human capital development, raw ICT accumulation faces rapidly diminishing marginal returns, failing to translate into genuine economy-wide structural transformation (Van Ark, 2016; Goldin & Katz, 2008).

To evaluate the structural integrity and empirical persistence of these findings, an alternative Random Effects (RE) framework was estimated as a baseline stability verification. The empirical results extracted from this Random Effects specification demonstrate that the directional signs, statistical significance levels, and numerical boundaries of the core parameters remain remarkably consistent with our baseline Fixed Effects model. Specifically, the linear Gini coefficient maintains its positive sign and significance ($\hat{\beta}_1 = 0.206$), while the quadratic Gini term ($GINI_{it}^2$) remains robustly negative ($\hat{\beta}_2 = -0.002$) yielding a calculated structural turning point at a Gini index of approximately 49.5, which closely converges with the baseline threshold of 51. Furthermore, the marginal impact of digital deepening (ICT_{it}) remains positive and significant but tightly constrained $\hat{\beta}_3 = 0.008$). while trade openness $TRADE_{it}$ continues to exert a significant contractionary effect on per capita output ($\hat{\beta}_3 = -0.195$). This high level of parameter convergence across alternative estimation techniques robustly confirms that the concave inequality trap and the muted digital dividend are genuine structural features of the sampled emerging markets rather than operational artifacts of a specific estimator constraint.

Conversely, structural advancements in technical efficiency, operationalized through Total Factor Productivity, exert a powerful impact in shaping large-scale outcomes, revealing progress hinges more on underlying performance shifts than surface-level digitization. Despite expectations, open trade links to slower growth here - evidence points to systemic fragility in lower-income economies. When digital shifts favor capital, early exposure to world markets may shrink local production, weaken industry too soon, leave workers behind. Conversely, the strategic accumulation of advanced human capital constitutes a critical mitigating mechanism, as higher levels of education significantly enhance income per capita. In this regard, human capital exerts a strong moderating effect: highly educated labor forces demonstrate greater adaptability to complex technological environments and are better equipped to leverage advanced digital infrastructures, thereby improving economic performance. Consequently, technology-driven growth dividends materialize only when complemented by a labor force capable of proficiently exploiting digital assets. Close to zero, the estimated coefficient for consumer price inflation proves statistically insignificant. Within this empirical sample, transitory monetary shocks and nominal price fluctuations exert negligible long-term effects on growth trajectories. Instead, structural determinants, such as distributive equity, institutional frameworks, and production configurations, remain the primary drivers of macroeconomic expansion, bypassing short-term nominal pricing noise. Furthermore, the empirical results indicate a structural contraction in the functional labor income share. This downward trend provides robust evidence of capital-augmenting technological change, whereby digital advancements preferentially augment capital returns over labor compensation. As technological deepening intensifies, wage growth lags behind the rents accrued by physical and digital infrastructure. This structural shift reinforces income polarization, creating cumulative, path dependent mechanisms that lock developing economies into persistent distributional disparities.

Conclusion and Policy Recommendations

This chapter demonstrates that digital shifts in the Global South often miss broad economic progress. When inequality crosses a tipping point, specifically a Gini coefficient above 51, the benefits of technology weaken due to lopsided wealth distribution. At such levels, purchasing power declines, human capital is underutilized, and institutions weaken. Growth fueled only by machines or infrastructure crumbles without fair access. Evidence points to stubborn gaps between output gains and real wages despite rising connectivity. Overall, policy frameworks must balance technological innovation with distributional equity. Progress measured just by GDP

ignores collapsing trust, uneven chances. Without deliberate policy, technology lifts only those already near the top. Long-run expansion relies less on investment volume, more on who it serves.

Mitigating these deeply embedded structural disparities requires transitioning away from volatile growth trajectories. This objective can be achieved through coordinated institutional interventions targeting two strategic dimensions. Crucially, the policy mix must emphasize structural complementarity, ensuring that policy instruments act in alignment rather than as isolated measures to generate sustainable macroeconomic momentum. Sustainable progress depends on coordinated and complementary policy implementation, whereby policy instruments interact cumulatively to generate long-term macroeconomic stability.

1. Improving how resources and taxes are shared: Consequently, emerging economies must modernize obsolete fiscal architectures to account for escalating digitalization and automation. Rather than disproportionately taxing labor compensation, policymakers should consider targeted corporate taxes on highly digitalized multinational firms and automated capital infrastructure. These new streams of money could flow into homegrown pools meant for invention and local growth projects. That support would ease how hard it is for smaller businesses to borrow what they need. With time, such shifts in funding priorities might help balance who gains when technology moves forward and giving both owners and workers fairer shares. Such redistributive frameworks and fiscal restructuring find strong support in the contemporary literature on economic disparities, notably Piketty (2020), who emphasizes that structural tax reforms targeting capital-intensive assets are vital to dismantle path-dependent advantages and fund the massive public investments required for high-tier human capital accumulation.

2. Shifting Public Spending to Focus on Advanced Technologies: Rectifying the misalignment between digital infrastructure deployment and aggregate productivity requires a strategic reallocation of capital expenditures toward R&D and high-value-added sectors. Instead of allocating resources solely to expanding basic digital connectivity, policymakers must build institutional capacity and human capital. This strategy involves establishing state-subsidized regional centers dedicated to advanced digital literacy and continuous technical upskilling. Formal educational curricula must undergo a comprehensive revision, emphasizing data science, software engineering, and advanced computational methodologies. Cultivating these high-order cognitive skills empowers the workforce, converting basic digital access into aggregate total factor productivity gains. Sustainable economic development requires the alignment of a highly skilled labor force with

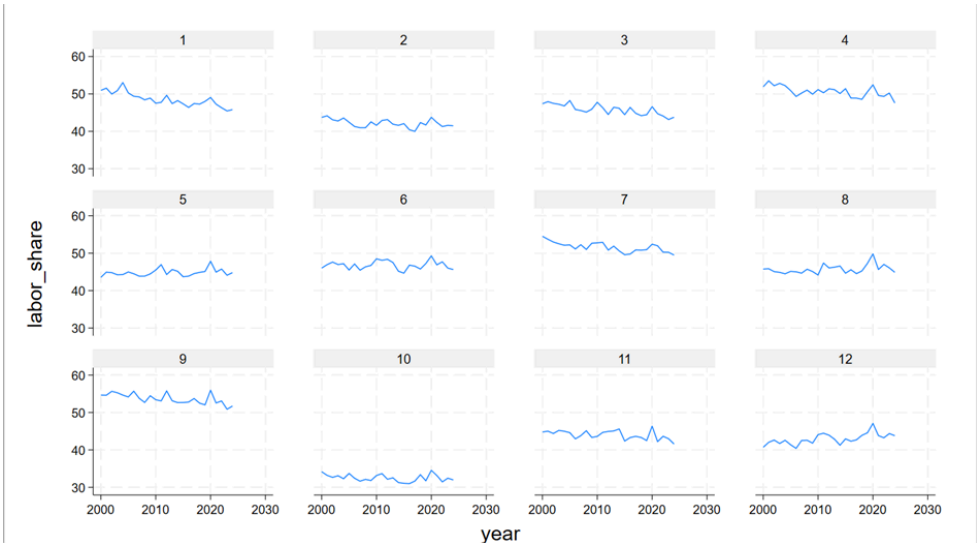
robust digital infrastructure, as neither factor can generate substantial productivity gains in isolation.

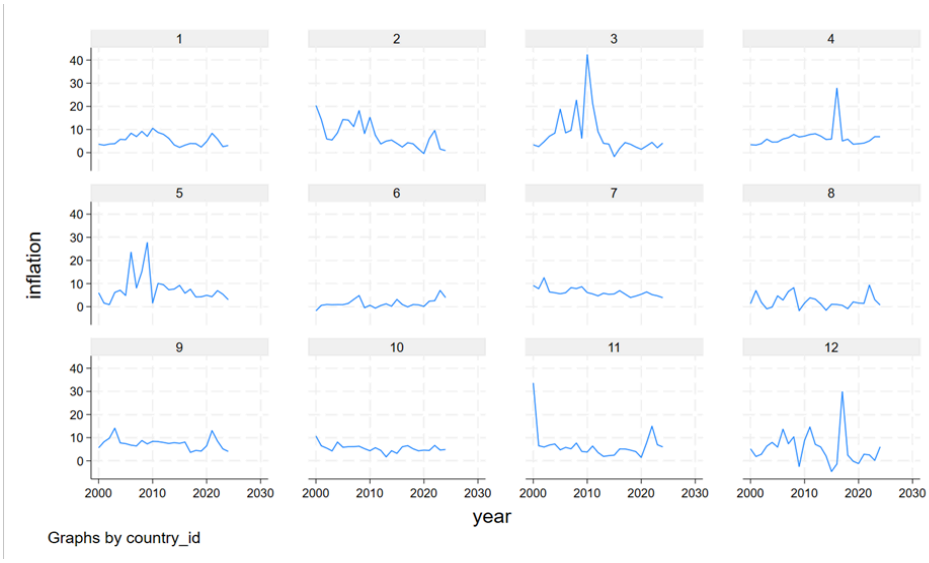
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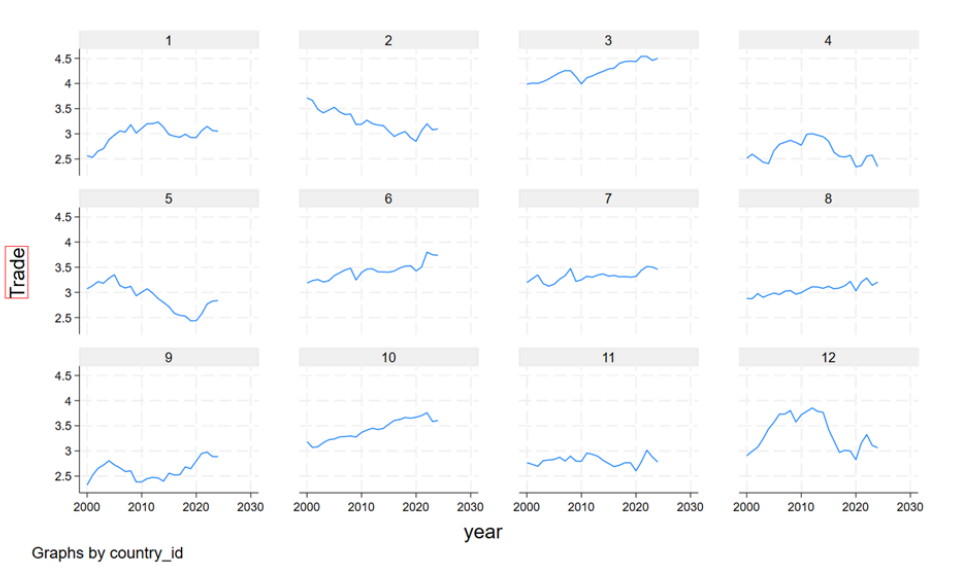
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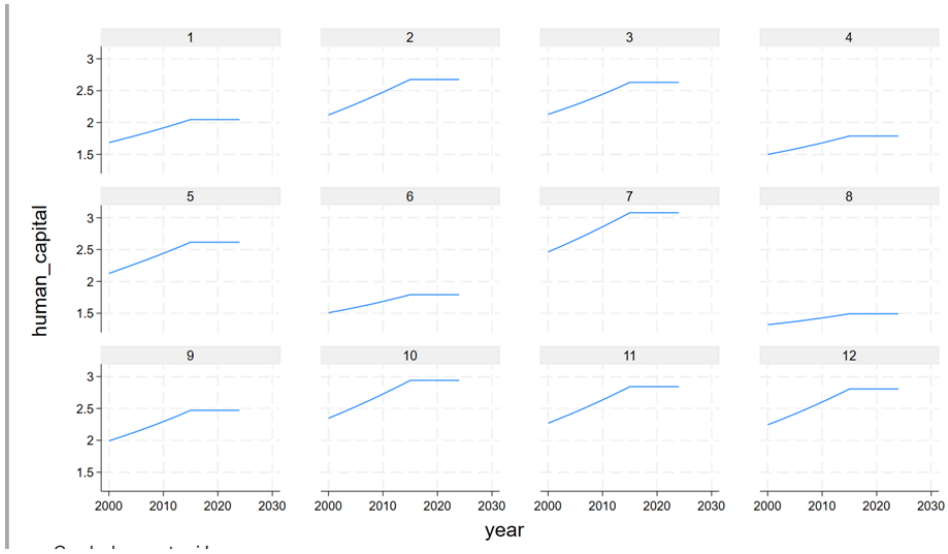
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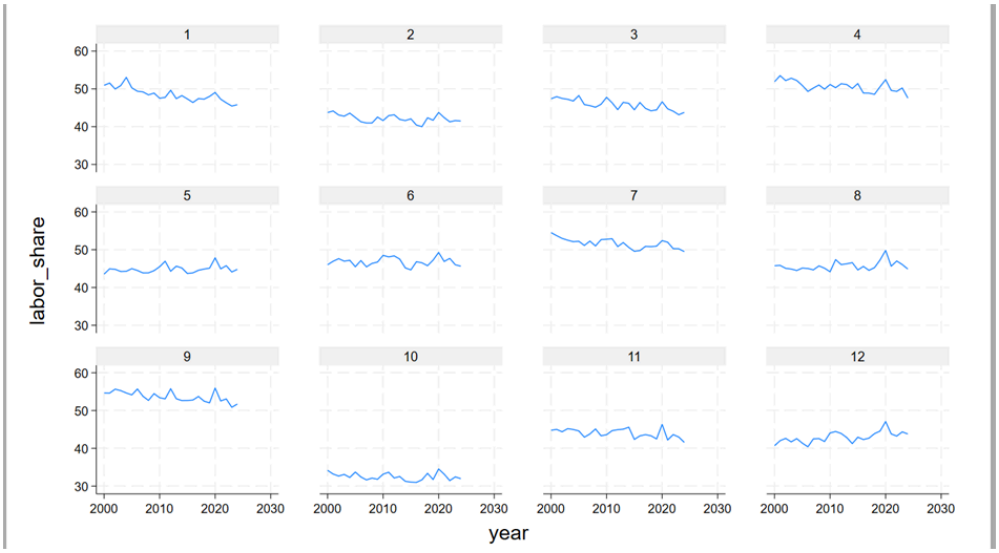
Appendix

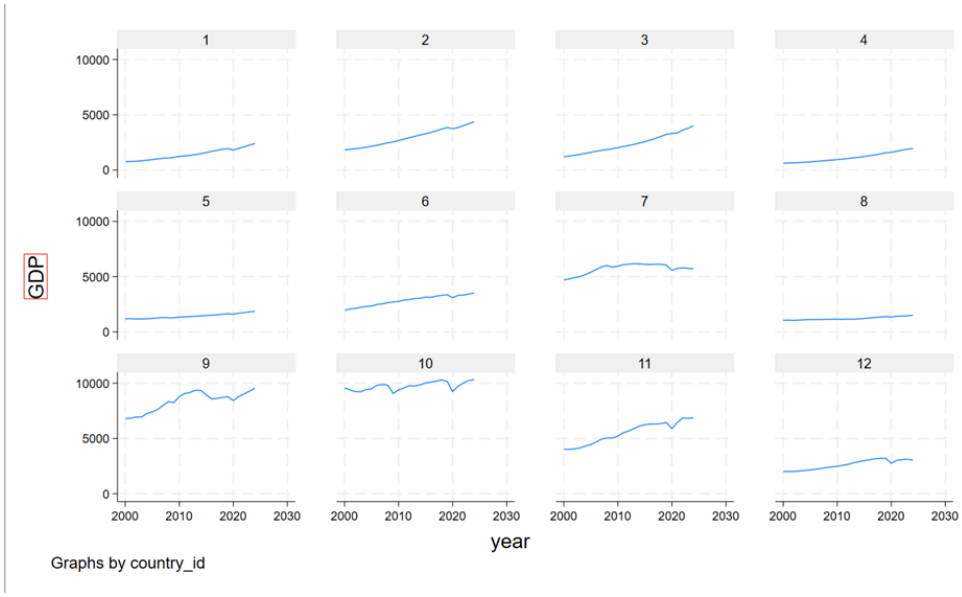

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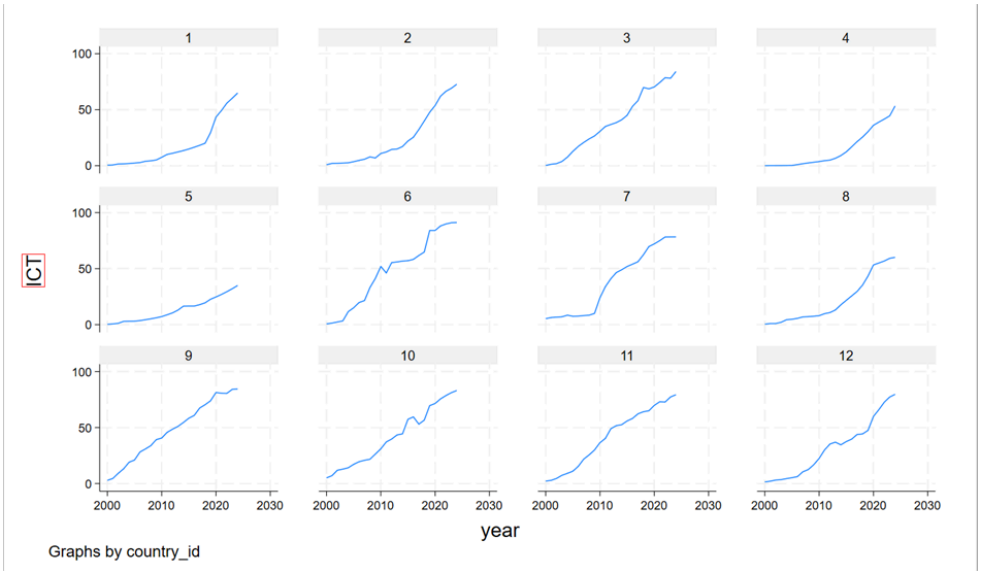

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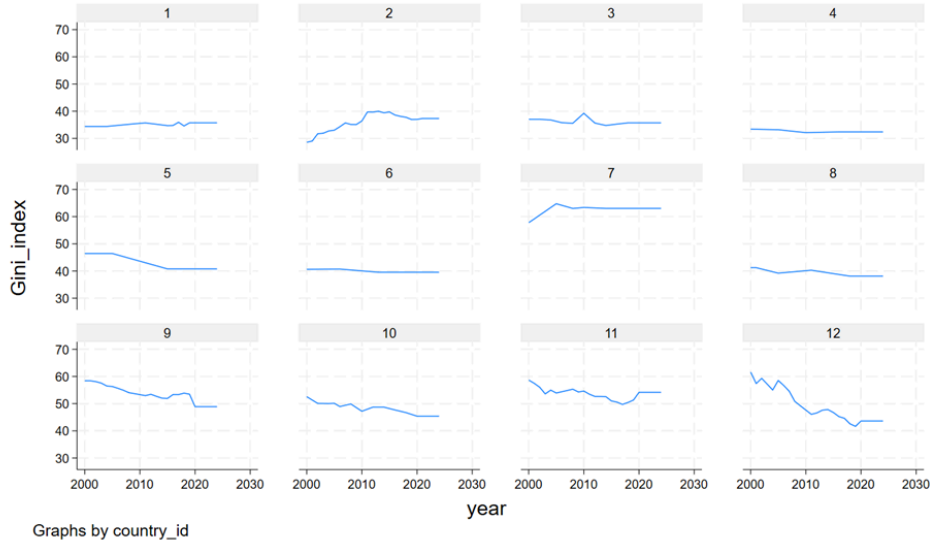

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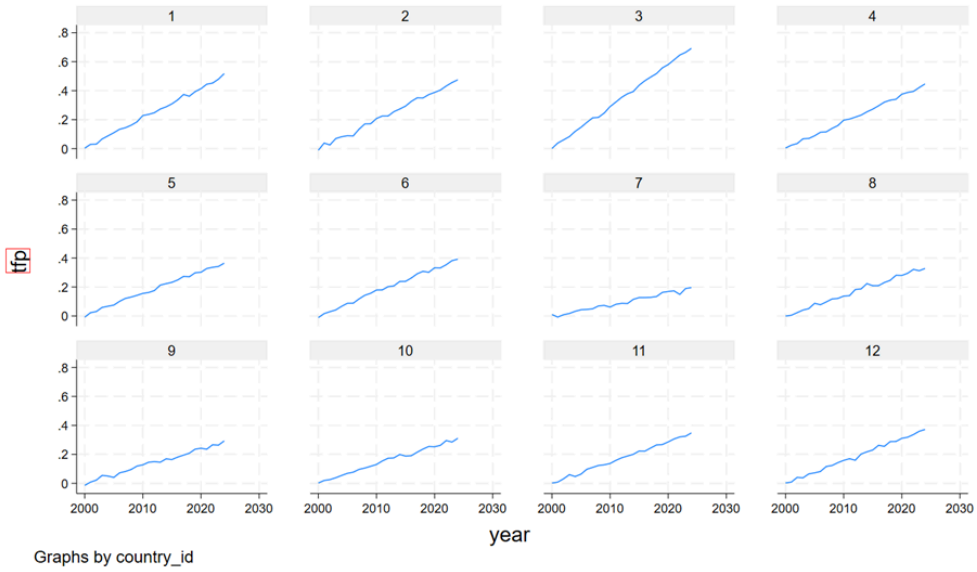

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Chapter 52:Ideology and the Making of Sinhala Studies in Sri Lankan Universities: A Comparative Study of Two Phases of Twentieth-Century Sinhala Literary Discourse

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Abstract

This study examines the ideological and methodological differences in Sinhala literary studies within Sri Lankan universities during two major phases of the twentieth century. The first phase, extending from the 1950s to the 1990s at the University of Ceylon and later the University of Peradeniya, was strongly influenced by colonial academic traditions and Western literary epistemology. The second phase emerged after the political and cultural transformation of 1956, particularly through the policy of "Sinhala Only" and the elevation of traditional Buddhist monastic institutions into modern universities in 1959. The study comparatively analyzes two representative scholars from these intellectual traditions: Professor Ariya Rajakaruna (1938–2024) and Professor Kulathilaka Kumarasinghe (1950–). Rajakaruna belonged to the Peradeniya intellectual tradition shaped by Professor Ediriweera Sarachchandra, widely regarded as the pioneer of modern Sinhala literary criticism. Kumarasinghe, by contrast, emerged from the nationalist monastic academic culture that developed under post-1956 educational reforms. The principal research question addressed in this study is: What are the ideological and methodological differences between these two scholars in the field of literary studies? The methodology of the study is based on comparative textual analysis informed by hermeneutic theory. Through close reading of their critical writings, the study identifies contrasting approaches to literary criticism, academic method, language usage, and editorial practice. The significance of this research lies in its contribution to understanding the two major intellectual phases of modern Sinhala literary discourse and the ideological foundations that shaped Sinhala studies in Sri Lankan universities.

Keywords -Modern Sinhala literary discourse; colonial ideology; nationalist ideology; Ariya Rajakaruna; Kulathilaka Kumarasinghe; hermeneutics.

Introduction

The development of Sinhala studies in Sri Lankan universities during the twentieth century reflects the broader intellectual, political, and cultural transformations that shaped modern Sri Lanka. Sinhala literary discourse did not emerge merely as an academic field concerned with language and literature; rather, it developed as a contested intellectual space influenced by colonialism, nationalism, religion, language politics, and postcolonial identity formation. The institutionalization of Sinhala studies within universities was deeply connected to the changing ideological foundations of Sri Lankan society, particularly the transition from British colonial modernity to post-independence Sinhala nationalism. The origins of modern Sinhala studies can be traced to the colonial educational reforms introduced under British rule in the nineteenth century. The Colebrooke-Cameron reforms of 1833 transformed the administrative and educational structures of Ceylon by introducing English-medium education and modern bureaucratic systems. These reforms led to the emergence of an English-educated middle class that became closely associated with colonial administration and Western intellectual traditions (Perera, 1969). The new elite gained access to English literature, European philosophy, philology, and modern historiography, while indigenous systems of learning associated with Buddhist temples and monastic education gradually lost institutional authority.

At the same time, colonial modernity also generated resistance among Buddhist intellectuals and Sinhala cultural nationalists. Christian missionary activities and the spread of Western education created anxiety regarding the decline of indigenous culture, language, and religion. Consequently, Buddhist revivalist movements emerged during the late nineteenth century under leaders such as Anagarika Dharmapala. These movements attempted to recover and reinterpret Sinhala literary and religious traditions in order to construct a modern national identity rooted in Buddhism and the Sinhala language (Fernando, 2013). The establishment of the University College in Colombo in 1922 and later the University of Ceylon in 1942 marked a decisive stage in the institutionalization of Sinhala studies. Initially, Sinhala was studied alongside Pali and Sanskrit under Indo-Aryan language studies, reflecting the philological orientation inherited from British universities (Coperahewa & Dharmadasa, 2021). Early scholars of Sinhala studies were primarily trained in Western academic traditions and focused on grammar, philology, textual editing, and historical linguistics. Their scholarly

activities resembled the academic practices of Orientalist scholarship in Europe, which emphasized the scientific study of language and classical texts. Consequently, the first phase of Sinhala studies within universities was characterized by methodological rigor, philological analysis, and comparative literary approaches derived from colonial academic culture.

A major transformation in Sinhala studies occurred after independence in 1948 and particularly after the political revolution of 1956. The election victory of S. W. R. D. Bandaranaike and the implementation of the "Sinhala Only" policy fundamentally changed the cultural and educational landscape of Sri Lanka. The nationalist movement challenged the dominance of the English-speaking elite and promoted Sinhala as the official language of administration, education, and intellectual life. This political shift enabled students from rural and non-elite social backgrounds to enter universities in larger numbers. It also facilitated the transformation of traditional Buddhist monastic institutions into state-recognized universities in 1959. The emergence of this new academic culture created a significant ideological divide within Sinhala literary discourse. On one side stood scholars associated with the University of Peradeniya and the colonial-modernist intellectual tradition. Their work was characterized by comparative literary criticism, engagement with Western aesthetics, and systematic academic methodology. On the other side emerged scholars influenced by nationalist and monastic intellectual traditions, whose work emphasized cultural authenticity, Sinhala identity, Buddhist values, and emotional engagement with literature. These two traditions represented not only different approaches to literary criticism but also different conceptions of culture, history, language, and national identity.

Among the scholars associated with the Peradeniya intellectual tradition, Professor Ediriweera Sarachchandra occupies a central position in the history of modern Sinhala literary criticism. Through works such as Modern Sinhala Fiction and Sahithya Vidyava, Sarachchandra introduced modern literary theory and critical methodology to Sinhala readers while simultaneously adapting concepts from Sanskrit poetics to modern literary discourse (Obeyesekere, 1984). As Wimal Disanayake (2005) observes, Sarachchandra trained an entire generation of students to rethink literature and literary criticism through modern analytical frameworks. The intellectual movement associated with him later became known as the "Peradeniya School," which played a decisive role in shaping twentieth-century Sinhala literary culture.

Professor Ariya Rajakaruna belongs to this Peradeniya intellectual tradition. Trained under Sarachchandra, Rajakaruna's literary scholarship demonstrates methodological

discipline, textual organization, comparative analysis, and attention to literary history. His work reflects the academic values associated with colonial-modernist university culture, particularly its emphasis on systematic criticism and scholarly precision. His editorial projects and literary anthologies reveal a conscious attempt to construct a coherent understanding of modern Sinhala literature through academic standards grounded in critical analysis and literary historiography.

In contrast, Professor Kulathilaka Kumarasinghe represents a later intellectual tradition that emerged from the nationalist and monastic academic environment after 1956. His writings are closely connected to Sinhala nationalist consciousness and the expansion of Sinhala-medium education in universities. Unlike the Peradeniya School, which maintained strong connections with comparative literary studies and Western criticism, Kumarasinghe's work places greater emphasis on cultural sentiment, social commentary, and nationalist interpretation.

This study aims to comparatively examine these two scholars to identify the ideological and methodological transformations that occurred within Sinhala literary studies during the twentieth century. The comparison between Ariya Rajakaruna and Kulathilaka Kumarasinghe is particularly significant because both scholars represent two different historical moments in the evolution of Sinhala academic culture. Rajakaruna symbolizes the continuation of colonial-modernist academic methodology within postcolonial Sri Lanka, whereas Kumarasinghe reflects the intellectual consequences of Sinhala nationalist educational reforms and the expansion of indigenous academic institutions.

The central research question of this study is: What are the ideological and methodological differences between Ariya Rajakaruna and Kulathilaka Kumarasinghe in their approaches to literary studies? In addressing this question, the study investigates differences in academic writing, editorial practices, literary interpretation, language usage, and critical methodology. The study also examines how broader political and cultural transformations influenced the formation of literary criticism in Sri Lankan universities. The research gap is evident: there are very few studies that take a comparative approach to the two scholars who represent the two traditions. And try to create a comparative approach based on the methodology. The historical background of the literary discourse in the 20th century is based on two major areas. These are colonial and post-colonial social and cultural constructions. The scholarship is bound with those, and it has presented their characteristics. The early part of this was strongly nourished with colonial methodology, and the other part had its own indigenous characteristics. The Sinhalese literary historiography has been developing

with the colonial and post-colonial contexts. This study expresses the vast context with attention to the two characters who are presenting their insights based on it.

Methodologically, this research is grounded in hermeneutic epistemology. Hermeneutics emphasizes the interpretation of texts by considering the relationship between language, historical context, authorial intention, and intellectual tradition. According to Uyangoda (2017), hermeneutic understanding seeks not only the objective meaning of texts but also the subjective dimensions of the author's worldview, individuality, and style. Why I select hermeneutics for this is that literary criticism is always based on textual analysis. Because the meanings of the texts and their constructions are bound with the social and cultural meanings. In this study, the writings of Rajakaruna and Kumarasinghe are read comparatively to reveal the ideological assumptions and methodological principles embedded in their literary criticism. The literary criticism discourse represents the social and cultural meanings of society.

The significance of this research lies in its contribution to the intellectual history of Sinhala studies and Sri Lankan literary criticism.

By examining two representative scholars from different intellectual traditions, this study contributes to understanding how university education, language politics, and nationalism influenced the production of literary knowledge in Sri Lanka. Furthermore, the study demonstrates that Sinhala literary criticism cannot be understood solely as a literary enterprise; it must also be examined as part of broader struggles over culture, identity, and power in modern Sri Lankan society.

Colonial Modernity and the Formation of Sinhala Literary Discourse

The arrival of European colonial powers fundamentally altered the social and cultural history of Sri Lanka. Portuguese influence began in 1505, followed by Dutch rule in the seventeenth century and British rule in 1796. However, unlike the Portuguese and Dutch, who primarily controlled the maritime provinces, the British succeeded in bringing the entire island under a centralized colonial administration after the Kandyan Convention of 1815 (Fernando, 2013). British colonial rule introduced new administrative systems, capitalist economic structures, missionary education, and modern legal institutions that gradually transformed indigenous social life.

One of the most significant consequences of British colonialism was the establishment of English-medium education. Through missionary schools and government educational reforms, English became the language of administration, higher education, and social mobility. The Colebrooke-Cameron reforms of 1833 accelerated this transformation by centralizing administration and promoting Western-style education in Ceylon (Perera, 1962).

The spread of English education produced a new English-educated middle class that became intellectually aligned with Western epistemology and literary traditions. This emerging elite gained familiarity with English literature, Greek and Roman classics, Enlightenment philosophy, and European philological methods. In many cases, however, their engagement with Western education created a cultural distance from indigenous Sinhala literary traditions and Buddhist intellectual heritage. Consequently, colonial modernity generated a tension between Western intellectual influence and indigenous cultural identity.

At the same time, colonial educational structures unintentionally created the conditions for the emergence of modern Sinhala literary criticism. Exposure to European literary theories, comparative philology, and historical criticism encouraged Sinhala intellectuals to reinterpret indigenous literary traditions using modern scholarly methods. One of the earliest and most influential figures in this process was James de Alwis. Educated within the colonial intellectual environment, de Alwis possessed knowledge of English, Greek, and Latin literature while also independently studying Sinhala, Pali, and Sanskrit. His translation and analysis of Sinhala grammatical texts in the mid-nineteenth century represented a major departure from traditional monastic scholarship.

James de Alwis's work is important because it attempted to analyze Sinhala literature comparatively through the frameworks of Western literary criticism and philology. Rather than treating Sinhala literary texts solely as religious or moral documents, he examined them as literary and historical artifacts. His scholarship introduced systematic literary categorization, textual comparison, and historical interpretation into Sinhala literary discourse. In this sense, de Alwis may be regarded as one of the earliest architects of modern Sinhala literary studies. His work symbolized the beginning of a transition from traditional monastic textual interpretation to modern academic literary criticism.

The influence of colonial modernity also stimulated a powerful Buddhist intellectual revival during the late nineteenth century. Christian missionary expansion and the cultural dominance of Western education created anxiety among Sinhala Buddhists regarding the decline of indigenous religion, language, and cultural identity. As a response, Buddhist revivalist movements emerged under figures such as Anagarika Dharmapala. These movements attempted to reconstruct Buddhism as a modern religion compatible with rationality, discipline, and nationalism (Fernando, 2013).

The emergence of print culture during the nineteenth century also contributed significantly to the formation of modern Sinhala literary discourse. Newspapers, magazines, novels, poetry collections, and translations became increasingly available to Sinhala readers. Print capitalism created a new reading public and transformed literature into a secular and public form of communication rather than a purely monastic or court-centered activity. This transformation enabled literary criticism to develop as a modern intellectual practice directed toward public debate and cultural reform.

Initially, much of modern Sinhala literature consisted of translations and adaptations from English and Indian literary traditions. As Ediriweera Sarachchandra observed, many early Sinhala novels and stories borrowed themes and narrative techniques from Western fiction. However, these literary experiments gradually evolved into more original forms of writing that attempted to represent the realities of Sinhala society. During this period, two major literary tendencies became visible.

The first tendency was associated with nationalist writers such as Piyadasa Sirisena, whose novels promoted Buddhist morality, anti-colonial sentiment, and Sinhala cultural identity. Sirisena's fiction functioned as an ideological extension of the Buddhist nationalist movement led by Anagarika Dharmapala. His novels sought to educate Sinhala readers morally and politically while resisting the influence of Westernized lifestyles. Thus, literature became an important medium for nationalist mobilization.

The second tendency was associated with romantic and popular fiction represented by authors such as W. A. Silva. His works emphasized emotional storytelling, romance, and entertainment, appealing to a rapidly expanding reading public.

A decisive transformation in Sinhala literary discourse occurred with the intervention of Martin Wickramasinghe during the early twentieth century. Wickramasinghe introduced realism, psychological depth, and sociological observation into Sinhala fiction.

The publication of Gamperaliya in 1944 is widely regarded as a turning point in modern Sinhala literature. The novel depicted the social transformation of a traditional village society under the pressures of modernization and capitalism. Wimal Disanayake (2009) notes that Ediriweera Sarachchandra praised the novel for its authentic representation of social transition and its sophisticated psychological characterization. Gamperaliya demonstrated that Sinhala fiction could engage critically with modern social realities while maintaining cultural specificity.

Wickramasinghe's literary criticism also played an important role in shaping modern Sinhala intellectual culture. Through works such as Vichara Lipi and Sinhala Sahityaye Nageema, he introduced modern critical vocabulary and analytical methods into Sinhala literary discourse. His criticism reflected a rational and comparative approach that differed significantly from the moralistic and nationalist literary criticism of earlier writers. As Obeyesekere (1984) observes, Wickramasinghe and Sarachchandra collectively contributed to the assimilation of Western literary concepts into Sinhala criticism while simultaneously adapting them to indigenous cultural traditions.

The influence of Indian literary modernity must also be considered in understanding the formation of Sinhala literary discourse. Sisir Kumar Das (2000) demonstrates that nineteenth-century Indian literature underwent a profound transformation through engagement with Western literary forms and critical methods. Compared to India, however, Sinhala literary modernity developed more slowly and with less diversity. One reason for this difference was the strong influence of Buddhist revivalism and Sinhala nationalism, which often encouraged literary conservatism and moral didacticism.

The Development of Sinhala Studies in Sri Lankan Universities

The institutionalization of Sinhala studies within Sri Lankan universities represents one of the most important developments in the intellectual history of modern Sri Lanka. The formal beginnings of Sinhala studies in the university system can be traced to the

establishment of the University College in Colombo in 1922. The institution was affiliated with the University of London and functioned according to the educational structures and academic standards of British universities. During this early period, Sinhala was not treated as an independent academic discipline. Instead, it was studied together with Pali and Sanskrit under the broader category of Indo-Aryan languages (Coperahewa & Dharmadasa, 2021). This arrangement reflected the influence of Orientalist scholarship, which approached South Asian languages through comparative philology and historical linguistics.

The early curriculum of Sinhala studies was heavily philological in orientation. Academic activities concentrated on grammar, etymology, textual editing, manuscript comparison, and the historical evolution of language. Literary texts were primarily examined as linguistic and historical documents rather than as creative or ideological works. This methodology resembled the dominant traditions of nineteenth-century European philology, which emphasized scientific analysis, classification, and historical reconstruction. The early scholars associated with Sinhala studies were deeply influenced by British intellectual traditions and were often educated in foreign universities. One of the pioneering figures in this field was Professor D. S. Rathnasuriya (1903–1951), who became the first Sinhala professor in the university system. Rathnasuriya earned his doctorate from the University of London, becoming the first Sri Lankan scholar to receive a PhD in Sinhala studies from a European university (Coperahewa & Dharmadasa, 2021). His work reflected the philological and historical orientation of colonial academic culture. Similarly, D. E. Hettiaratchi, another major pioneer of Sinhala studies, specialized in historical linguistics and completed research on the history of Sinhala vowels at the University of Calcutta.

A major turning point in the history of Sinhala studies occurred in 1942 with the establishment of the University of Ceylon. The creation of an independent university enabled Sinhala studies to develop as a separate academic department rather than as a subsection of Indo-Aryan studies. According to Coperahewa and Dharmadasa (2021), the university council decided that Sinhala, Tamil, Pali, Sanskrit, and Arabic should each have their own departments. This institutional separation marked an important stage in the recognition of Sinhala as an independent academic discipline with its own intellectual identity.

The relocation of the University of Ceylon from Colombo to Peradeniya in 1952 further transformed the nature of Sinhala studies. Under the leadership of Ivor Jennings, the university was redesigned as a modern residential academic institution

modeled on British universities but adapted to Sri Lankan cultural conditions. The Peradeniya campus became a major intellectual center that attracted scholars from diverse disciplines and created a vibrant academic atmosphere. Importantly, the university also represented an attempt to reconcile modern higher education with national culture and indigenous intellectual traditions.

The Sinhala Department at Peradeniya introduced significant curricular reforms that expanded the scope of Sinhala studies beyond philology and grammar. The department incorporated courses on literary criticism, cultural history, modern Sinhala literature, comparative literature, and linguistics (Coperahewa & Dharmadasa, 2021). Sinhala-medium instruction was also introduced, which allowed students educated in Sinhala to pursue university studies more effectively. This development broadened access to higher education and contributed to the emergence of a new Sinhala-speaking intellectual class.

The most influential figure associated with this transformation was Professor Ediriweera Sarachchandra (1915–1996). Sarachchandra fundamentally changed the direction of Sinhala literary studies by introducing modern literary criticism and comparative aesthetics into university education. Unlike earlier philological scholars, he emphasized literature as a creative and aesthetic form that should be analyzed through critical interpretation rather than merely historical description. His works, including Modern Sinhala Fiction (1943) and Sahithya Vidyava (1965), introduced Sinhala readers to modern literary theories, narrative analysis, and aesthetic criticism (Obeyesekere, 1984).

According to Obeyesekere (1984), Sarachchandra created a modern critical vocabulary in Sinhala that enabled literary criticism to function as a sophisticated academic discipline. His work represented an intellectual synthesis between Eastern aesthetic traditions and Western modernism.

The influence of Sarachchandra extended far beyond literary criticism. As a university teacher, he trained an entire generation of Sinhala intellectuals, writers, poets, dramatists, and critics. Wimal Disanayake (2005) observes that Sarachchandra encouraged students to rethink literature critically and to approach literary texts through analytical and comparative frameworks. This intellectual movement later became known as the “Peradeniya School.” The Peradeniya School dominated Sinhala

literary discourse during the 1950s and 1960s and introduced new standards of literary criticism, modernism, and artistic experimentation into Sinhala literature.

However, the dominance of the Peradeniya intellectual tradition began to face challenges after the political transformation of 1956. The rise of Sinhala nationalism and the implementation of the "Sinhala Only" policy dramatically altered the social composition of universities and the ideological orientation of higher education. The expansion of Sinhala-medium education enabled students from rural and lower-middle-class backgrounds to enter universities in larger numbers. Simultaneously, traditional Buddhist monastic institutions were granted university status in 1959, leading to the emergence of a new academic culture strongly influenced by Sinhala-Buddhist nationalism.

The transformation also affected academic methodology and writing style. Earlier scholars associated with colonial-modernist traditions generally maintained systematic scholarly practices, including careful textual editing, chronological organization, and theoretical analysis. In contrast, some later scholars influenced by nationalist academic culture adopted more emotional, rhetorical, and socially engaged approaches to criticism. The distinction between academic literary criticism and public cultural commentary became less rigid.

The development of Sinhala studies in Sri Lankan universities during the twentieth century can therefore be understood as a movement through two major intellectual phases. The first phase was shaped by colonial philology, Orientalist scholarship, and comparative literary criticism. The second phase emerged through postcolonial nationalism, Sinhala-medium education, and the institutional expansion of indigenous academic culture. These two phases did not exist in complete isolation from one another; rather, they interacted continuously and produced complex debates regarding literary value, language, culture, and national identity.

The comparative study of scholars such as Ariya Rajakaruna and Kulatilaka Kumarasinghe illustrates these broader intellectual transformations. Rajakaruna inherited the methodological discipline and comparative orientation of the Peradeniya tradition, while Kumarasinghe represented the later nationalist and monastic intellectual culture that emerged after 1956. Their works reveal how university education, ideology, and cultural politics shaped the evolution of Sinhala literary criticism in modern Sri Lanka.

Ariya Rajakaruna and Kulathilaka Kumarasinghe: A Comparative Analysis

The comparative study of Professor Ariya Rajakaruna and Professor Kulathilaka Kumarasinghe provides an important framework for understanding the ideological and methodological transformations that occurred within Sinhala literary studies during the twentieth century. Although both scholars contributed significantly to Sinhala literary criticism and university scholarship, they emerged from two different intellectual traditions shaped by distinct historical and cultural conditions. Rajakaruna represented the Peradeniya academic tradition that developed under the influence of colonial-modernist intellectual culture, while Kumarasinghe represented the nationalist and monastic academic tradition that expanded after the political and educational transformations of 1956. Their writings reveal not only differences in literary interpretation but also broader differences regarding academic methodology, language usage, intellectual discipline, and ideological orientation.

Ariya Rajakaruna was intellectually shaped within the environment of the University of Peradeniya under the guidance of Professor Ediriweera Sarachchandra. The Peradeniya School emphasized comparative literary criticism, aesthetic analysis, historical awareness, and systematic scholarly methodology. Rajakaruna inherited these intellectual values and applied them consistently in his literary criticism and editorial work. His scholarship demonstrates a clear concern for literary structure, historical continuity, textual organization, and conceptual precision. He approached literature as a disciplined academic field requiring rigorous interpretation and scholarly objectivity.

For this study, I have selected 2 texts of the two critics. These are the,

1 Anthology of Modern Sinhala Poetry (1962) with two volumes.
2 *Nuuthana Sinhala Kawiyee Nawa Yugaya* (2007) (The new era of Modern Sinhala Poetry)

First one from Ariya Rajakaruna and the second one from Kulathilaka Kumarasingha.

Rajakaruna's contributions to modern Sinhala literary criticism can be particularly observed through his editorial and critical works on modern Sinhala poetry. His anthology Modern Sinhala Poetry (1962), published in two volumes, represents one of the most systematic attempts to document and interpret the development of modern Sinhala poetry. The anthology was later reprinted with revised introductions, indicating Rajakaruna's continued engagement with literary historiography and critical reassessment. His editorial method demonstrates careful chronological arrangement, thematic organization, and scholarly contextualization. Such practices reflect the

influence of modern academic standards associated with the Peradeniya intellectual tradition.

The methodological orientation of Rajakaruna's criticism also reflects the broader influence of Sarachchandra and Martin Wickramasinghe. Like these earlier critics, Rajakaruna viewed literature not merely as an emotional or moral expression but as an artistic and intellectual form shaped by historical, cultural, and aesthetic forces. His criticism often engages with literary movements, poetic techniques, thematic developments, and historical transitions within Sinhala literature. Consequently, his writings reveal a rational and analytical approach rooted in comparative literary methodology.

Kulathilaka Kumarasinghe, in contrast, emerged from a different academic and ideological background. His intellectual formation was closely connected to the post-1956 nationalist educational environment and the expansion of Sinhala-medium university education. Unlike the Peradeniya School, which maintained strong engagement with Western literary theory and comparative criticism, Kumarasinghe's work reflects a more nationalist and culturally emotional orientation. His scholarship is closely connected to Sinhala cultural identity, contemporary social issues, and nationalist literary consciousness.

The differences between Rajakaruna and Kumarasinghe become especially visible in their approaches to academic writing and textual organization. Rajakaruna consistently follows systematic academic conventions in editing and structuring his works. He carefully arranges literary materials chronologically and thematically, demonstrating awareness of literary history and scholarly coherence. His editorial work suggests that literary criticism should maintain intellectual order and methodological consistency.

Kumarasinghe's works, however, often demonstrate a less systematic approach to organization and editing. His collection Nuuthana Sinhala Kawiyee Nawa Yugaya (2007) illustrates this tendency. Although the book contains essays on several modern Sinhala poets, the subtitle specifically refers to the poet Parakrama Kodithuwakku without a clear scholarly justification. The organization of the text lacks thematic and chronological coherence, and the essays appear to have been collected from previously published newspaper articles and magazine writings without substantial revision or integration. This editorial approach reflects a different understanding of literary criticism, one less concerned with academic structure and more focused on cultural commentary and public engagement.

Another significant distinction between the two scholars lies in their use of language and critical vocabulary. Rajakaruna employs a disciplined academic language influenced by literary theory, comparative criticism, and analytical reasoning. His writing style reflects conceptual clarity and scholarly restraint. He avoids excessive emotionalism and instead attempts to construct literary arguments through rational interpretation and textual evidence. Such characteristics are closely associated with the Peradeniya critical tradition, which valued intellectual precision and aesthetic analysis.

Kumarasinghe's language, by contrast, is often characterized by emotional and abstract expressions that lack clear theoretical grounding. His criticism frequently employs phrases such as "the suffering of innocent people," "the anger of society," or "the gap between rich and poor" without systematically defining these concepts within a coherent analytical framework. This style resembles journalistic or ideological commentary more than formal literary criticism. While such language may create emotional immediacy and social relevance, it often reduces theoretical clarity and scholarly rigor.

The contrast between the terms nuthana ("modern") and nawa ("new") in Kumarasinghe's work illustrates this issue more clearly. In Sinhala intellectual discourse, the term nuthana carries a broad philosophical and historical meaning connected to modernity, rationalism, industrialization, and post-Enlightenment cultural transformation. The concept of "modernity" therefore involves complex historical and theoretical implications. The term nawa, however, simply refers to something recent or contemporary. Kumarasinghe's interchangeable use of these terms suggests a lack of conceptual precision regarding literary modernity and intellectual history. Rajakaruna, shaped by the Peradeniya tradition, demonstrates greater awareness of such distinctions and approaches literary terminology with more scholarly discipline.

The ideological foundations of the two scholars also differ significantly. Rajakaruna's criticism reflects the cosmopolitan and comparative orientation of the Peradeniya intellectual tradition. Although deeply engaged with Sinhala literature and culture, his approach remains open to international literary theory and cross-cultural comparison. This perspective was influenced by bilingual intellectuals such as Sarachchandra, who believed that Sinhala literature could be enriched through dialogue with global literary traditions (Obeyesekere, 1984). Rajakaruna, therefore, represents a form of literary modernism grounded in analytical scholarship and comparative aesthetics.

Kumarasinghe's work, by contrast, reflects the ideological atmosphere of postcolonial Sinhala nationalism. His criticism places greater emphasis on social commitment, national culture, and emotional engagement with literary texts. Literature is often treated as an instrument of cultural identity and collective consciousness rather than as an autonomous aesthetic form. This approach reflects the intellectual environment created by Sinhala-medium education and nationalist academic institutions after 1956. Within this context, literary criticism became closely connected to questions of cultural authenticity, social morality, and national ideology.

The difference between the two scholars can also be understood through their relationship to modernity. Rajakaruna inherited a tradition that attempted to reconcile Sinhala literary heritage with modern critical methodology. His scholarship demonstrates confidence in rational inquiry, systematic criticism, and academic professionalism. Kumarasinghe's work, however, reflects a more ambivalent relationship with modernity. While he participates in modern literary discourse, his criticism often privileges cultural sentiment and nationalist consciousness over theoretical analysis. As a result, his writings reveal the tensions between academic modernism and postcolonial cultural nationalism within Sinhala studies.

Despite these differences, both scholars occupy important positions within the history of Sinhala literary criticism. Rajakaruna contributed to the continuation and refinement of the Peradeniya critical tradition, preserving standards of literary scholarship shaped by comparative aesthetics and academic rigor. Kumarasinghe, on the other hand, represents the democratization and localization of Sinhala literary discourse after the expansion of Sinhala-medium education. His work reflects the growing influence of rural intellectuals, monastic educational institutions, and nationalist cultural movements within university scholarship.

Ultimately, this comparison demonstrates that literary criticism in Sri Lanka cannot be separated from the political and institutional contexts in which it developed. The evolution of Sinhala studies was deeply influenced by colonial education, nationalist reforms, language policy, and changing social structures. Ariya Rajakaruna and Kulathilaka Kumarasinghe represent two distinct moments in this historical process: one grounded in cosmopolitan academic modernism and the other shaped by nationalist cultural consciousness. Their works continue to illustrate the complex relationship between ideology, literary criticism, and university scholarship in modern Sri Lanka.

Conclusion

This study has examined the ideological and methodological development of Sinhala literary studies in Sri Lankan universities through a comparative analysis of two representative scholars, Professor Ariya Rajakaruna and Professor Kulathilaka Kumarasinghe. By situating their intellectual contributions within the broader historical transformations of twentieth-century Sri Lanka, the study has demonstrated that Sinhala literary discourse evolved through two major academic and ideological phases. The first phase was largely shaped by colonial modernity, Western academic methodology, and comparative literary criticism, while the second phase emerged through postcolonial nationalism, Sinhala-medium education, and the expansion of monastic academic institutions after the political transformation of 1956.

The study first explored the historical formation of modern Sinhala literary discourse under colonial rule. British educational reforms, particularly the Colebrooke-Cameron reforms, introduced English education, modern philology, and Western intellectual traditions into Sri Lanka. These developments produced an English-educated intellectual class that became influential in shaping early university scholarship and literary criticism. At the same time, colonial modernity generated cultural anxieties among Sinhala Buddhists, leading to revivalist movements that attempted to preserve and reconstruct indigenous language, religion, and literary traditions. Thus, the foundations of modern Sinhala literary discourse emerged through a complex interaction between colonial epistemology and anti-colonial cultural nationalism.

The study further demonstrated that the establishment of Sinhala studies within the university system was deeply influenced by these historical processes. Early Sinhala scholarship at the University College and the University of Ceylon was strongly shaped by British philological traditions. Scholars such as D. S. Rathnasuriya and D. E. Hettiaratchi approached Sinhala literature through textual editing, historical linguistics, and grammatical analysis. Their work reflected the methodological discipline and scientific orientation associated with Orientalist scholarship and colonial academic culture. Although this tradition contributed significantly to the institutionalization of Sinhala studies, it often treated literature primarily as a linguistic and historical object rather than as a social and ideological form.

A major transformation occurred with the rise of the Peradeniya intellectual tradition in the mid-twentieth century. Under the leadership of Professor Ediriweera

Sarachchandra, Sinhala literary criticism moved beyond philology toward modern literary theory, comparative aesthetics, and interpretive criticism. Sarachchandra and the scholars associated with the Peradeniya School attempted to synthesize Western literary criticism with Sanskrit poetics and indigenous aesthetic traditions. This intellectual movement played a decisive role in modernizing Sinhala literary studies and establishing literary criticism as a sophisticated academic discipline. The Peradeniya School also encouraged creative experimentation and critical engagement with modernity, realism, and contemporary social experience.

Within this intellectual context, Ariya Rajakaruna emerged as a representative scholar of the Peradeniya tradition. His literary criticism and editorial work demonstrate the characteristics associated with colonial-modernist academic culture: systematic organization, comparative methodology, conceptual precision, and scholarly discipline. Rajakaruna approached literature as a structured field of academic inquiry and emphasized chronological coherence, theoretical awareness, and critical analysis. His scholarship reflects the cosmopolitan orientation of the Peradeniya School, which remained open to international literary theory while maintaining engagement with Sinhala literary traditions.

In contrast, Kulathilaka Kumarasinghe represents the intellectual and ideological environment that developed after the political transformation of 1956. The expansion of Sinhala-medium education and the recognition of Buddhist monastic institutions as universities created a new generation of scholars shaped less by colonial academic traditions and more by Sinhala-Buddhist nationalism and cultural consciousness. Kumarasinghe's criticism reflects this broader ideological atmosphere. His writings emphasize social emotion, cultural identity, and nationalist sentiment rather than systematic theoretical analysis. Compared with Rajakaruna, his work demonstrates less concern for methodological consistency, editorial structure, and conceptual precision.

The comparison between Rajakaruna and Kumarasinghe therefore reveals significant differences in academic methodology, language usage, literary interpretation, and ideological orientation. Rajakaruna's criticism is grounded in rational analysis, comparative scholarship, and aesthetic interpretation, whereas Kumarasinghe's criticism reflects emotional engagement, nationalist discourse, and cultural commentary. These differences are not merely individual or stylistic; they represent broader historical shifts within Sinhala studies and Sri Lankan intellectual culture.

Importantly, the study has shown that Sinhala literary criticism in Sri Lanka cannot be understood independently of institutional and political history. The transformation of university education, language policy, and nationalist politics directly influenced the development of literary discourse. Sinhala studies became not only an academic discipline but also a site of ideological negotiation where competing visions of culture, modernity, nationalism, and identity were debated. The transition from colonial-modernist literary criticism to nationalist academic discourse reflected wider tensions within postcolonial Sri Lankan society regarding the meaning of national culture and intellectual authority.

The study also demonstrates the usefulness of hermeneutic methodology in literary and intellectual history. Through comparative reading and interpretation of texts, it becomes possible to identify the ideological assumptions, conceptual frameworks, and intellectual traditions embedded within literary criticism. The writings of Rajakaruna and Kumarasinghe reveal how language, style, and editorial practices themselves reflect broader historical and ideological positions.

Furthermore, this research contributes to the broader understanding of South Asian literary modernity. Similar to developments in India and other postcolonial societies, Sinhala literary discourse evolved through the interaction between Western intellectual influence and indigenous cultural traditions. However, the Sri Lankan experience demonstrates a unique trajectory shaped by Buddhist revivalism, Sinhala nationalism, and language politics. The development of Sinhala studies in universities illustrates how academic disciplines themselves become historically constructed through political and ideological struggles.

Finally, this study argues that the intellectual history of Sinhala studies should be examined not simply as the history of literary scholarship but as part of the broader cultural history of modern Sri Lanka. The comparative analysis of Ariya Rajakaruna and Kulathilaka Kumarasinghe reveals the coexistence of two competing academic paradigms within Sinhala literary criticism: one rooted in cosmopolitan modernism and comparative scholarship, and the other grounded in nationalist cultural consciousness and postcolonial identity politics. These paradigms continue to influence Sinhala literary studies and intellectual discourse in contemporary Sri Lanka.

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Chapter 53: Analysis of the contribution of CSR practices of bauxite mining companies to the local development of the Boké area in Guinea.

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Abstract

Corporate Social Responsibility (CSR) is a concept open to multiple interpretations depending on the context and each stakeholder's specific understanding. However, the mining sector is characterized by legitimacy issues and a complex interplay of interests among various stakeholders. In the mining sector, CSR enables mining companies to contribute to sustainable development in local communities impacted by their activities. This article analyzes the CSR practices of mining companies operating in the Boké region through the lens of stakeholder and regulatory theories, before examining their contribution to local development. The study is based on a case study, conducted using both qualitative and quantitative approaches. It reveals, in particular, a low level of adoption of the recommendations of the national CSR policy letter in the Guinean mining sector, a lack of dialogue among stakeholders, and the shortcomings of control and regulatory mechanisms.

Keyword : CSR, mining companies, local community, stakeholders.

INTRODUCTION

Since 2015, the United Nations (UN) has been calling on governments, businesses, and civil society organizations to work together on the Sustainable Development Goals to achieve shared and sustainable prosperity (Kantabutra, 2024). In Guinea, bauxite mining companies[2]Mining has generated significant profits for the government, but few benefits for local communities. Since 2017, the Guinean government has been attempting, through various policies and regulations, to direct a greater share of the benefits from mining towards sustainable development in the communities hosting mining companies. These reforms are expected to involve mining companies, within the framework of their CSR practices, in the economic and social development of mining communities (Ministry of Mines and Geology, 2017).

The issue of social responsibility in communities hosting mining companies is a crucial challenge for both public authorities and mining companies (Raufflet, 2014). Multinational mining companies are subject to intense pressure and scrutiny from various societal forces: local communities, non-governmental organizations (NGOs), the media, human rights groups, donors, etc., which have formed in response to concerns about the societal and environmental impacts of mining (Yakovleva & Marco, 2020).

Public authorities, for their part, have initiated reforms to promote public regulation of CSR in the mining sector. Mining companies, given the changes in their environment, also have an obligation to adopt responsible behavior in the conduct of their activities (Krupicka & Dreveton, 2015). CSR in the mining sector, in fact, embodies a vision that reconciles economic, social, and environmental objectives with a requirement for sustainability in a context characterized by both conflicting interests (Boiral & Croteau, 2004).

Mining is cyclical and has significant economic, social, cultural, and environmental impacts on local communities (Raufflet, 2014). It often takes place in remote areas characterized by impoverished populations and a lack of infrastructure (Belem, 2016). The presence of a mining company in a locality also generates conflicts (Thomas, 2017).

In Guinea, from 2015 to 2018, the prefecture of Boké, where the largest bauxite mining companies operate, recorded 35 protests and road blockades by local communities against the mining operations of the Boké Mining Company

[2]Rock transformed into metallic aluminum needed by the automotive, aviation, pharmaceutical, etc. industries.

(Camara et al., 2021). These conflicts are often violent in nature, ranging from the destruction of mining company property and equipment, to the destruction of administrative buildings and loss of human life (Pakoun, 2015).

For local communities and public authorities, the presence of a mining company in a locality is an opportunity to revitalize the local economy, create jobs, and provide social benefits for local populations (Thomas, 2017). This is why the integration of sustainable development principles through CSR in the management of mining companies is now a solution commonly supported in institutional and scientific circles (Rumpala, 2019).

However, in practice, the concept of CSR remains open and is rife with a multitude of interpretations and understandings specific to each actor and the context in which it is used (Purvis et al., 2019). Its adoption in several fields (political, institutional, managerial, etc.) gives it a vague character and makes it subject to multiple interpretations.

In Guinea, as in other African countries rich in natural resources, two opposing logics clash in the context of mining: the legitimacy claimed by local communities and the legality brandished by mining companies (Daouda, 2014). Local communities consider themselves the most legitimate stakeholders, fully deserving of the benefits from mining operations. Mining companies, in turn, emphasize the legality of their presence, authorized by public authorities through the granting of operating permits and the signing of agreements.

In this situation, CSR in the mining sector inevitably raises questions : what does CSR in the mining sector refer to ? to what extent do CSR practices contribute to local development ?

First, we propose to analyze CSR in the mining sector through stakeholder and regulatory theories. Second, we present the results of the 2019 survey of mining companies operating in the Boké area of Guinea.

1. CSR Concept

Nowadays, CSR is widely popularized in the mining sector (Reeve 2017 ; Campbell & Laforce 2016 ; Lado et al. 2011) cited by Doucouré (2023). However, it remains an open concept, with a multitude of interpretations and understandings specific to each actor and the context in which it is used (Purvis et al., 2019). This ambiguity is reflected in its trajectory since its origins.

Born in the 19th century in the United States, CSR was initially characterized by the charity of large, humanist, and religiously inspired capitalists who addressed

certain basic needs of their workers. Theorized by Bowen in 1953 in his book "Social Responsibilities of the Businessman," it advocated for the integration of values sought globally by all segments of society, beyond the purely economic objectives pursued by shareholders and legal obligations. It was in the 1990s that the hybridization between sustainable development and CSR occurred through the "invisible hand" of British consultants who contributed to the invention and dissemination of the new universal framework for sustainable development. In this context, CSR is considered a framework for encouraging the private sector to contribute to sustainable development goals. Companies are responsible not only to current stakeholders affected by their activities, but also to those unable to act, such as future generations (Godard, 2006).

Although initially linked to moral and religious values, it has been enriched by the ethical dimension in business. It then established itself as a tool for addressing the challenges of capitalism and globalization before continuing its evolution in connection with sustainable development (Dinia & Chakor, 2018).

Some believe that CSR goes beyond the company's economic interests, others reduce it to profit maximization, while some argue that it consists of voluntarily responding to societal expectations. Others emphasize that CSR translates into taking stakeholders' interests into account (Dinia & Chakor, 2018).

For the European Commission, corporate social responsibility means that a company is accountable for its impacts on all its stakeholders. It involves the ongoing commitment of companies to behave fairly and responsibly while contributing to economic development and improving the quality of life of their employees and their families.

According to the International Organization for Standardization (ISO 26000)[3]This refers to an organization's responsibility for the impacts of its decisions and activities on society and the environment. This translates into transparent and ethical behavior that contributes to sustainable development, the health and well-being of society, takes into account the expectations of stakeholders, respects applicable laws, and aligns with international standards of behavior. This responsibility is integrated throughout the organization and implemented in its relationships.[4].

[3]A standard from the International Organization for Standardization (AFNOR) relating to CSR.
[4]ISO 26000, Social Responsibility, page 21

These different conceptions of CSR mean that there is no consensus on its design and definition. However, there is a consensus that, firstly, companies must take into account the existence of stakeholders and honor their obligations towards them; secondly, they must respond to social demands emanating from their environment and consider the negative impacts of their activities on the elements that make up that environment.

In the mining sector, CSR is manifested through the evolution of mining company governance. It encompasses all the practices implemented by mining companies that go beyond their legal obligations in order to respect the principles of sustainable development and contribute to the economic and social development of mining communities (Doucouré, 2023).

Furthermore, the African Union (AU), in its African Mining Vision 2050, views CSR as complementary to the responsibilities of the State through institutions and local authorities (Africa-Canada Forum, 2013). To align with this vision, most African countries rich in mineral resources have initiated structural reforms in their mining sectors to promote sustainable development. In Guinea, CSR has been the primary tool for implementing this policy.

For its part, the Guinean government defines CSR in the mining sector as the contribution of companies to sustainable development, having a multidimensional, multi-actor, temporal, spatial, voluntary and mandatory character (National CSR Policy Letter, 2017).

2. Theoretical foundations of CSR in the mining sector

The theoretical framework used to justify CSR practices is not new. Studying its theoretical foundations means setting aside theories that question the consideration of stakeholders in corporate management.

In the mining sector, internal and external pressures exerted on mining companies are leading them to move beyond a purely shareholder-centric perspective and instead focus on considering the interests of local communities. Krupicka & Dreveton (2015), changes in the business environment are at the origin of the increase in practices implemented by companies to integrate sustainable development by adapting responsible behavior in the exercise of their activities.

Stakeholder theory and regulatory theory provide the appropriate theoretical framework for analyzing CSR practices in the mining sector. Stakeholder theory helps determine why mining companies are generally interested in considering the interests of stakeholders, and specifically those of local communities.

Regulatory theory, on the other hand, explains why public authorities and international institutions are interested in implementing corporate social responsibility standards in the mining sector.

2.1 CSR and stakeholders in the mining sector

Integrating sustainable development principles such as economic efficiency, social equity, and environmental protection into corporate actions necessarily involves incorporating CSR into the company's management strategies. Incorporating sustainable development principles into the company's CSR strategy requires leveraging stakeholder theory. Stakeholder theory is considered a benchmark in CSR, although its complexity and multidimensional nature are subject to debate. Since the publication of Freeman's book in 1984, "Strategic Management: A Stakeholder Approach," several levels of analysis have emerged from the scientific literature, giving rise to different approaches (Gherra, 2010). The different interpretations of stakeholder theory give rise to three approaches: normative, predictive and descriptive.

The normative approach focuses on the legitimate interests of stakeholders, which the company must, by ethical or moral obligation, take into account. The predictive approach considers stakeholders strategically and believes that taking a stakeholder group into account is not justified unless it is proven to generate economic growth (Gherra, 2010). For (Chamaret, 2007) the key stakeholders for a mining company are local communities, employees, shareholders, local governments, and legislators. In the mining sector, local communities are the key stakeholder. As for the descriptive approach, it views the company as a constellation of cooperative and competitive interests, which are taken into account in the company's management (Gherra, 2010).

The normative approach to CSR in the mining sector justifies the choice of local communities as the primary stakeholders. These communities host mining companies and are capable of challenging company activities through advocacy movements to ensure their concerns are better addressed. The predictive approach, on the other hand, leads companies to view local communities as a group of individuals with the power to delegitimize mining activities. In the mining sector, strategic management of relationships with local communities is essential for the sustainability and stability of mining companies.

Table 1 : Typology of stakeholders in mining companies**Source :** adapted from the work of Récoché and Azapagic (2004)

Stakeholder Group	Checked	Azapagic

	industrial groups	
	Operating companies	Shareholders
Internal stakeholders	Employees	Employees
	Trade unions	Trade unions
	Consumers	
	Shareholders	
	Suppliers	
	Carriers	
	Buyers	Suppliers
	Subcontractors	Customers
Traditional external stakeholders	Customers	Contractors
	Banks	Insurers
	Insurance	Investors
	Investors	
	Research and training organization	
Expanded external stakeholders	Political parties	local communities
	River	NGOs
	NGOs	
	Media	
Coordinating authorities	Government	Government
	Promotion and regulatory authorities	Local authorities
	Administrative authorities	

2.2 CSR regulation in the mining sector

The public debate on CSR is marked by two opposing conceptions: voluntary self-regulation versus standards that are subsidiary to regulations (Chanteau, 2015). Both conceptions reflect the traditional opposition between liberalism and public intervention in business. Furthermore, many authors formulate CSR as a moral or regulatory constraint and define it as a set of obligations incumbent upon companies, in addition to their strictly financial and legal obligations (Acquier & Aggeri, 2015).

The idea of regulating CSR is not universally accepted. Those who advocate for the absolute primacy of shareholders believe that coercing an approach that is essentially voluntary is unnecessary. However, civil society argues that CSR practices risk failing to align with sustainable development principles if left unregulated. Faced with this situation, a compromise between voluntary action and regulation is needed (Daouda, 2014).

Corporate Social Responsibility (CSR) regulations in the mining sector provide a means for public authorities to involve companies in the economic and social development of communities impacted by their activities and in environmental protection (Ferrand, 2013). As a duty to be accountable for one's actions, CSR evokes a personal ethic or a social convention, whether voluntary or binding, that is not based on legal frameworks. It may, however, be based on more or less binding legal mechanisms (Lado, 2017).

In Guinea's mining sector, the mining code and the national policy letter on CSR and local content serve as regulatory tools. The national policy letter on CSR and local content was developed to promote a balance between compliance with legal frameworks and voluntary initiatives by mining companies. The obligations of mining companies regarding their social responsibility towards local communities and the management of company-community relations are set out in the mining code and the environmental code, along with their implementing decrees.

Table 2 : Voluntary, mandatory and binding CSR framework in the mining sector**Source :** adapted from Lado (2016).

	Soft law field[5]	Area of soft or hard law	Hard law domain[6]	
Membership	Voluntary	Voluntary	Mandatory	Mandatory
Application	Voluntary	Mandatory	Voluntary	Mandatory
Constraint	The commitments are voluntary and not subject to any monitoring or	Once membership is decided, the application comes with monitoring and	Membership is mandatory, but participation in	Membership and application are mandatory, therefore

[5] Soft law is a set of non-binding legal texts that can be freely interpreted.
[6] Hard law, a legal text that cannot be freely interpreted and is binding.

	control mechanisms, nor to penalties.	control mechanisms and penalties.	certain provisions is voluntary.	accompanied by monitoring, control and penalty mechanisms
Example	Charters, code of conduct	Global Compact Extractive Industries Transparency Initiative. Incentive mechanism of certain laws	Incentive mechanisms in certain laws	Ordinary Law

3. Methodology

3.1 Presentation of the study area

The prefecture of Boké, with an area of 11053 km2, is located on the banks of the Rio Nuez on the maritime coast, it is bordered to the north by Guinea-Bissau, to the northwest by the prefecture of Gaoual, to the west by that of Télémélé, to the south by that of Boffa and to the east by the Atlantic Ocean (See figure 1).

With a population of 450,278 inhabitants[7]The Boké prefecture comprises one (1) urban commune, Boké-Centre, and nine (9) rural communes (CR). 86% of the population resides in the rural communes, while 14% lives in the urban commune of Boké-Centre. The main economic activities in the area revolve around mining, agriculture, fishing, and small-scale trade. The presence of mining companies explains the dynamism observed in trade and service activities in certain localities such as Kamsar and Sangaredi. In rural areas, the population engages in traditional economic activities, including market gardening, subsistence farming, rice cultivation, arboriculture, artisanal fishing, and salt production.

[7]Ministry of Planning ; National Institute of Statistics (INS) RGPH 3 Website : http://www.stat-guinee.org

Figure 1 : Location of the prefecture of Boké



Source : Center for Environmental Studies and Research (2014)

3.2 Research Methods and Materials

This research was based on a case study approach. This required interviewing both the actors who support CSR policies in the mining sector (Community Relations and Local Content Development Service and mining companies), and the NGOs and local communities denouncing and suffering the negative effects of mining.

The investigations were conducted through interviews with members of Local Community Councils (CCLMs) from mining communities in the Boké prefecture, namely: Bintimodya, Dabiss, Kamsar, Kanfrandé, Kolaboui, Malapouyah, Sangaredi, Sansalé, and Tanènè. We collected information on the degree of adoption of CSR and local content policies. Additional information was gathered from officials of the Community Relations and Local Content Service (SRCCL) and community rights NGOs. The interviews with CCLM members took place in Conakry during the national CCLM observatory over three days, from May 23 to 24, 2019, which was attended by all CCLM members from the mining communities of Boké. Interviews with SRCCL officials and the head of the NGO Action Mine Guinée took place as needed for new information from May to August 2019. Then, a questionnaire was developed and used during the mission commissioned by SRCCL to assess the implementation of CSR and local content policies in mining companies operating in the Boké area between 01 and 15 September 2019.

The documentary observation technique allowed us to consult and collect information from meeting minutes, SRCCL mission reports, legislative texts (mining code, operating agreement, CSR and local content policy letter in the mining sector, etc.).

The semi-structured interview technique targeted members of the Local Community Councils (CCLM) in the Boké area, officials from the Regional Mining Council (SRCCL), and the head of the NGO Action Mine Guinée. The interviews addressed the quality of dialogue between local communities and mining companies, the social interventions of mining companies, and the impact of mining activity on the living conditions of local populations. Discussions with SRCCL officials focused primarily on CSR regulatory frameworks in the mining sector. Discussions with the head of Action Mine Guinée centered on his perspective on CSR governance in the mining sector.

The questionnaire-based survey technique was used with four (4) mining companies selected as part of a mission organized by the SRCCL. The questionnaire focused primarily on the supply, training, and local employment policies implemented by the mining companies. It also provided an opportunity to make observations about the environment and living conditions of the local communities where the mining companies operate.

Table 3 : Sample size**Source :** author (2019)

No.	Target population	Effective
1	The members of the CCLM from the mining communities of Boké	15
2	The heads of the DRCCL (Department heads, research officers, assistant to the minister in charge of economic affairs and Social…)	6
3	Mining companies investigated	4
4	Civil society actors (NGOs)	1
	Total	26

3.3 Data Processing

The information was grouped and processed according to its meaning and the category of the person interviewed using Microsoft Word 2016 software. Others were subjected to statistical processing using Microsoft Excel 2016 software.

4. Results

4.1 Impact of mining on local populations

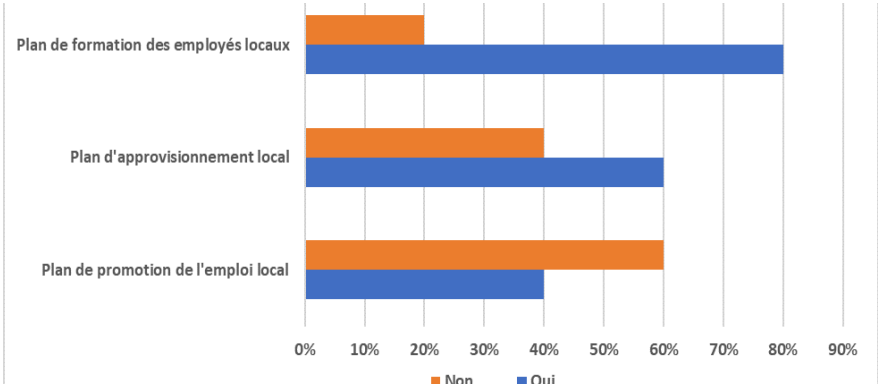
Interviews with members of the Local Community Councils (CCLM) in Boké helped identify the impacts of mining on local communities based on the geographical location of the villages (see Table 3). 80% of the individuals interviewed came from bauxite mining areas. 10% came from areas crossed by mineral transport routes, and 10% from areas located on the banks of a river near a mining site or on the ocean where bauxite shipping ports are located.

Table 4: The impacts of mining on local communities**Source :** author (2019)

Communities living near bauxite mining areas	Communities living along bauxite transport routes	Communities living along rivers and the ocean
Loss of arable land, deforestation Threats to waterways, drying up of wells, cracks in homes, displacement DustNoises Threat to livestock farming Air pollution	DustNoises Accident Road deterioration, air pollution	Water pollution, deforestation Loss of arable land; Loss of aquatic resources Threat to fishing

4.2 Level of adoption of CSR strategies by mining companies

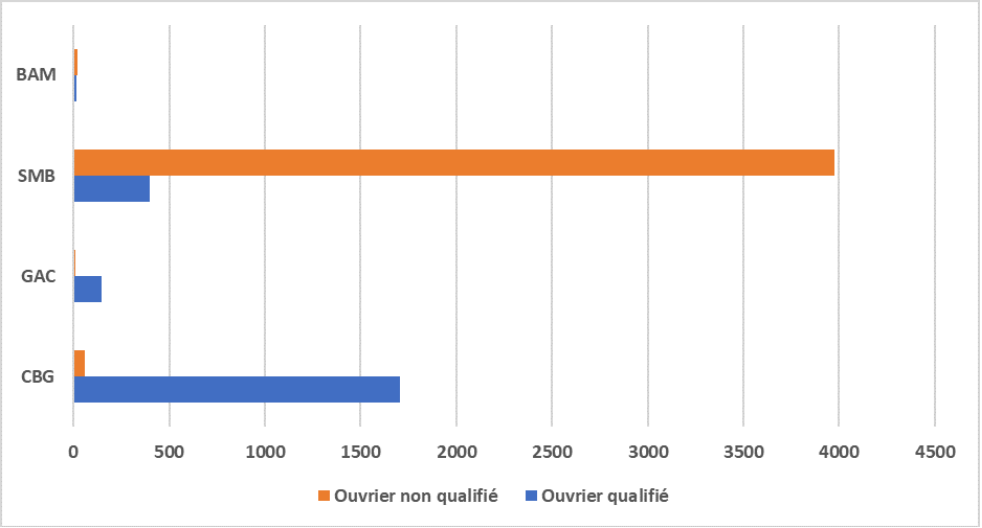
The survey reveals that 80% of mining companies have a local worker training plan, 60% of companies have a local procurement plan and 40% have a local employment promotion plan.



Source : Author (2019)

4.3 Job creation

The quota for employing nationals (skilled and unskilled workers) stipulated by the mining code is met in all the mining companies surveyed. However, the number of jobs created by these companies remains low compared to the active population in the Boké region. Furthermore, the mining code does not provide for a quota for community-based employment.[8].



Source : Author (2019).

4.4 Dialogue between local communities and mining companies

More than half of those surveyed stated that mining companies are reluctant to engage in dialogue with local communities. According to the individuals surveyed, mining companies fear that these dialogues will turn into platforms for demands. The lack of dialogue between mining companies and local communities is the cause of several conflicts in the mining areas of Boké.

4.5 Compensation for damages

CCLM members interviewed about the compensation scale revealed its obsolescence and called for harmonization and updating by the State. The outdated compensation scale has led most mining companies to propose their own scales, which they then apply during compensation operations. Regarding compensation payments by mining companies, the majority stated that these companies take considerable time to pay. One CCLM member from a

[8]Jobs reserved for communities directly impacted by the mining company's activities.

community impacted by CBG stated that the company can take up to three months before victims receive their compensation. All respondents affirmed that water pollution, the destruction of wild fruit trees, the loss of arable land, air pollution, cracks in houses caused by blasting, and the noise from the machinery are not being compensated.

4.6 Performance of control devices

The promotion and control of CSR practices are ensured respectively by the DRCCL, the CCLM, the Prefectural Council for Environmental and Social Monitoring and Evaluation (CPSES) and civil society organizations gathered around the Publish What You Pay (PWYP) coalition.

The interview with DRCCL managers revealed a lack of resources and expertise for missions assessing and monitoring local content and social responsibility practices. The CPSES conducts inspection missions at mining companies' sites to report on their environmental impact and damage to communities. A board member stated that the organization's operations are paralyzed by a lack of financial resources and expertise. According to this CPSES official in Boké, "The organization of these missions depends on the goodwill of the mining companies because they are the ones who cover travel expenses."

5. Discussion

The normative approach of stakeholder theory shows that mining companies have an ethical or moral obligation to consider the legitimate interests of local communities. They are concerned with sustainable development and are directly impacted by the effects of mining activities (Bocquet, 2014).

The study revealed a low level of adoption of CSR and local content policies by mining companies. This result corroborates the assertion ofCamara et al (2021)which shows that local populations are demanding better living conditions, more jobs and respect for commitments.

The results reveal a lack of equitable redress for the negative impacts of mining. This finding confirms Lado's (2016) study, which shows that CSR in the mining sector is only credible and sustainable within an institutional environment that promotes the detection and penalization of predatory behavior.

The results show that mining companies fear that opportunities for dialogue with local populations could turn into platforms for demands. However, Boidin et al. (2016) argue that the contribution of mining companies to local development depends on the nature of the relationships between mining companies, local

communities, and local authorities. Indeed, the establishment of Local Community Development Committees (CCLMs) could have strengthened these relationships and reduced conflicts with local communities.

6. Conclusion

The article highlights the ambiguous nature of the CSR concept. Considered to be open to several interpretations and understandings specific to each actor, in the mining sector it is characterized by a legitimacy issue.

The aim of this article was to analyze the contribution of CSR practices by mining companies operating in Boké. Firstly, it reveals a low level of adoption of corporate social responsibility and local content policies among bauxite mining companies in Boké. Secondly, it reveals a lack of dialogue between mining companies operating in Boké and local communities, as well as the inadequacy of existing regulatory mechanisms for corporate social responsibility and local content in Boké. Furthermore, the study shows that public regulation of CSR in the mining sector (monitoring compliance with international standards, the mining code, and the national policy letter on local content and CSR) does not guarantee that mining companies will engage in sustainable development processes in mining communities.

The effective adoption of the national CSR and local content policy letter in the Guinean mining sector by mining companies is a guarantee of conflict prevention, equitable distribution of the benefits of mining and mitigation of negative impacts on local populations.

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Chapter 54: Borders And Voices: Interrogating The Use Of Code-Switching In Shyam Selvadurai And Janice Pariat

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Abstract

This study focuses on the writing voices of two established South Asian authors, Shyam Selvadurai and Janice Pariat, whose novels and short stories depict the social and political dynamics of the Sri Lankan and Indian diaspora. The intention of the paper is to analyze how language mediates identity, shapes resistance, and promotes cultural creolization through a study of Selvadurai's *Funny Boy* and *Cinnamon Gardens,* and Pariat's *The Nine-Chambered Heart* and *Seahorse*. Selvadurai, writing in English, Sinhala, and Tamil, addresses the ethnopolitical conflict and colonial past of Sri Lanka, while Pariat's narratives are vivid English infiltrated by regional expressions, revealing the complexity of India's linguistic-cultural identity. Within the context of cultural materialism and postcolonial language theory, this work explores language as both a tool of cultural domination and a site of contestation. By exploring belonging, migration, and hybridity, this paper underscores that the language decisions made by the authors are not merely aesthetic but also a socio-political question inscribed in the languages of their national cultures. The study advances general postcolonial debates on cultural representation by discussing how authors navigate linguistic systems to construct identity. This study emphasizes the dynamism of linguistic creolization.

Keywords: postcolonial literature; South Asian literature; multilingualism; cultural hybridity; linguistic identity; narrative techniques; colonial legacy; resistance through language

Introduction

Language: The Missing Link Between Minority Identity and Power

Language, as one of the aspects of culture connected to people's identity, serves both as an instrument of expression and as a sign of identity. In post-colonial societies, it has a further connotation, as it represents socialization post-colonization, reconciliation, and resistance. English became a language of power in South Asia when the colonials made it a language of government administration and education. Nevertheless, its use did not come without a loss of regional and indigenous languages, whose importance reduced them to inferior status to this present day. There are writers from South Asia who better understand this burden associated with the paradigm, using English as a medium of written communication alongside the reintroduction and indigenization of diverse South Asian languages in their writing.

Comparative Analysis of Language Use

Between their works, Selvadurai and Pariat use different linguistic tropes to explore distinct ways of representing both collective identity and cultural mixedness. Through his selection of Tamil, Sinhala, and English in his writing, Selvadurai highlights ethnic language conflicts in Sri Lanka, while Pariat weaves regional linguistic terms into his English to display India's diverse cultural identity.

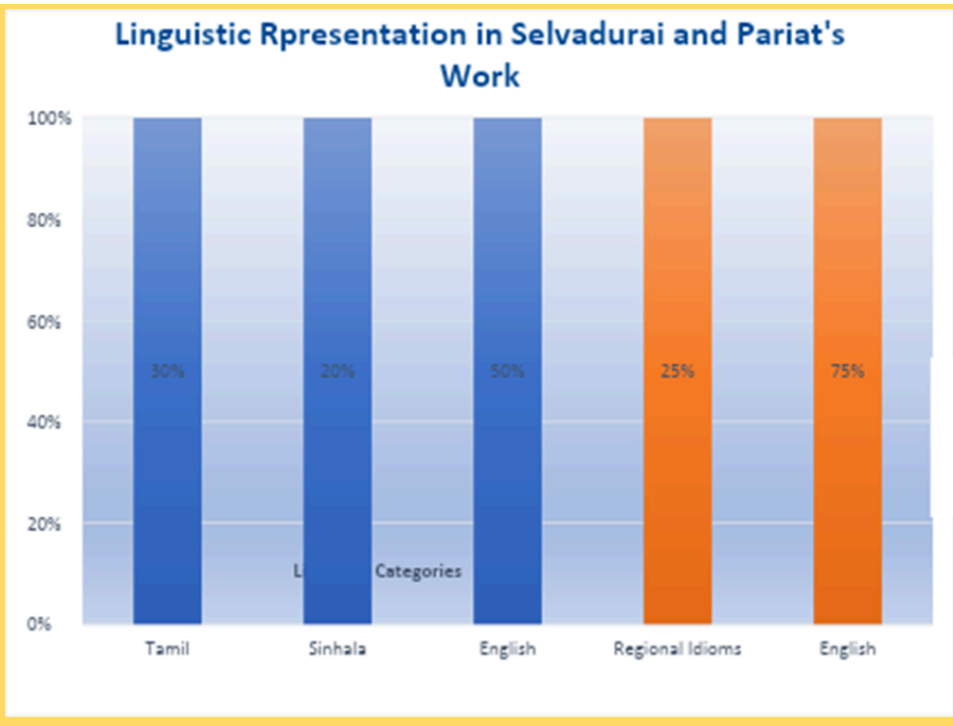


Figure 1. This chart shows the proportions of English, Tamil, and Sinhala, along with regional Indian dialects, in the writings of Shyam Selvadurai and Janice Pariat.

The chart demonstrates that English is the predominant language in both authors' textual output, yet shows how they employ regional vernaculars to achieve significant cultural impact.

This is not only a question of language, but also of theme: the inter- and intra-ethnicity, history, and culture conflict and coexistence so common to South Asian society are reflected in the texts. Based on the forenamed novels, language is a discursive space of cultural transition. About their personal experience of using and being influenced by English, they tell me stories that reflect the multilingual settings of their countries, Sri Lanka & India, where English is only one among many languages, such as Tamil, Sinhala, Hindi, and numerous regional languages, not to forget the substandard dialects. These linguistic intersections are clearly rooted in issues of Otherness, both in terms of ethnic/racial origins as well as other aspects of identity, and oppression and oppression counteraction, which the two authors address in their writings.

Shyam Selvadurai and Janice Pariat: Literary Voices of South Asia

Selvadurai and Pariat both vividly explain the possession, location, and displacement of the South Asian diaspora characters in the postmodern global village through novelistic representations. Like most of his compatriots, Selvadurai was born in Sri Lanka to a Tamil family, and his writings reflect the socio–political climate of his country of origin. His stories, which include Funny Boy and Cinnamon Gardens, explore ethnicity, sexual orientation, and colonialism. In his two pictures, Selvadurai effectively embraces the multi-lingual experience of Sri Lanka, using Tamil, Sinhala, and English to render the complexities of his characters' existence in a torn society. Selvadurai also highlighted the multifarious potential of language in the peacemaking of contentious identities, where Tamil is unsteadfastising as resistance, and English as colonization.

On the other hand, the works of Janice Pariat are linguistically and culturally diverse, indicating India. Originally from Northeast India, a region considered peripheral in the Indian socio-political imaginary, Pariat introduces a voice that is barely audible in the annals of Indian English-writing. Writing of Out of Place, especially the stories in The Nine Chambered Heart and Seahorse, reflects how modern India is in transition, caught between tradition and the 'New Order'. Pariat's reflections are disjointed and poetic, and though English becomes his primary language, idioms and pop culture draw on the region. She relates issues of love, memory, migration, and belonging by identifying with a group identity through her characters' narrations.

The Socio- Political Context Construction of Language in the South Asian Context

The languages reflected upon in both Sri Lanka and India have been influenced by colonization and post-colonial conflict. Language has been a major political concern in Sri Lanka; Sinhala and Tamil are evident in the country's ethnic tensions. The change of Sinhala as the official language in the post-independence period diluted the Tamil people further, and, ethnically, they had to endure civil war. Accordingly, Selvadurai's narratives reconstruct this context through language to express the interaction between personal and political subjectivity. Tamil language in his work refers to cultural identity and power; English language refers to opportunities and Othering.

This is especially so in India, where there are 22 official languages and well over 500 dialects spoken within a highly charged political environment. English

brought in by the colonial masters acts as a language of upward mobility amongst the elites in the urban centers, while on the same account, indigenous languages that have a cultural value still persist. Pariat's narratives contain this plurality: the use of English for a worldwide readership, the localization of that medium, enabled by idiomatic expressions and metaphors. Her characters, most of whom are women in their teens or early twenties, juggling between tradition and the contemporary world, are trapped in those literal linguistic territories as they are in existential ones.

An in-depth focus on discussing language concerns will be on Language as Resistance and Reclamation.

As in Selvadurai and Pariat, language as the process of speaking hybridity becomes an indicator of human subjugation to the forces of cultural globalization as well as an oppositional tactic in the construction of identity. By using multiple languages, they counter the hegemonic overemphasis on standard English and embrace the diverse linguistic contexts in which they exist. The interjection of both Tamil and Sinhala phrases into an English-based narrative in Selvadurai's Funny Boy challenges readers' exclusivist perception of language, thus challenging the linguistic colonialism of Sri Lankan Tamil. Resonantly, The Nine-Chambered Heart by Pariat presents counterparts to regional proverbs, which testify to the cultural-linguistic relativity of Indians and their identity confluence.

Regrettably, this linguistic hybridity is also mirrored at the narrative level. Whereas Selvadurai's narrative structure highlights conflict in the personal and political arenas in a linear, chronological timeline, Pariat's episodic, nonlinear, fluid structures offer angles on memory and identity. Such stylistic strategies.mvp highlighted the authors' concerns about society, portraying it as one in which such identities are not fixed but are ever in the process of construction.

Theoretical Framework

The theoretical framework largely anchors this study; in other words, it is the theoretical tools used to decode the linguistic and narrative strategies of Shyam Selvadurai and Janice Pariat. This part discusses how cultural materialism and postcolonial language theories can be used to analyze the socio-political and cultural contexts of the authors' nations, Sri Lanka and India, as reflected in their works.

Cultural Materialism: Placing Literature into Context

Cultural materialism is a type of criticism practiced by Raymond Williams, which attempts to reclaim culture back to its materiality, arguing that artifacts such as literature should be understood with reference to their cultural production. Literature, therefore, is not produced in a vacuum as Williams suggests but is a product of socio-political environments (Williams 48). It forces a critical approach to literature as a strictly aesthetic artifact and situates it within the given cultural, economic, and political conditions.

Relation to Selvadurai's Works

Picking up from where I left off in my discussion, it can be noted that cultural materialism enables us to examine how the socio-political context of Sri Lankan narratives—colonialism, conflict, and inequality—resonates in Selvadurai's Funny Boy and Cinnamon Gardens. For instance:

1.Colonial Influence on Language: English, thus, is a colonial language that the British left behind in their colonies, and it is politically and socially dominant in Selvadurai's stories as well as in power. On the one hand, Tamil expresses people's desire to preserve their culture and fight for it; on the other hand, Sinhala expresses the majority's rule.

2.Ethnic and Class Stratification: Particularly, the use of these two languages explains the relationship between ethnicity and class in Sri Lankan society. For instance, English-speaking colonialists keep themselves aloof from native languages in a location such as Cinnamon Gardens.

Relevance to Pariat's Works

To sum up, Janice Pariat's Cultural Materialism allows the author to analyze her works through the prism of socio-economic and cultural changes of contemporary India. Her other works – The Nine-Chambered Heart and Seahorse – address issues of migration, globalization, and urbanization. Key aspects include:

1.Globalized English: Many of Pariat's characters are situated in cities where English is now a business or global language, but she infuses her work with regionalisms and culture-specific allusions that refuse the flattening of globalization.

2.Fragmentation and Modernity: The episodic format of her storytelling reflects the kaleidoscope of her characters' lives, living in modern India.

Cultural materialism reveals that both authors address language and narrate techniques as socio-political discursive constructions of their societies.

Postcolonial Language Theories: Language as a Negotiation Ground

Postcolonial literature locates language as having played a major role in colonialism, anti-colonial struggles, and the creation of new identities. The theoretical perspectives that should be relied on to make a comprehensive analysis of postcolonial language include those developed by Ngũgĩ wa Thiong'o, Homi K. Bhabha, and Salman Rushdie.

Ngũgĩ wa Thiong'o and the Decolonization of Language

In one of his early, tightly focused books, Decolonizing the Mind, Ngũgĩ wa Thiong'o makes a strong case for crafting postcolonial literature in African indigenous languages. It does so by continuing to keep the former colonial subjects out of their cultural context and denying them the power of an original voice, as Ngũgĩ pointed out. Writing in the native language can help a writer get back to one's roots and avoid submission to colonial oppression (Ngũgĩ 94).

•**Application to Selvadurai:** Despite using English as his main language, Selvadurai's use of Tamil and Sinhalese phrases negates the Anglo-American hegemony of the English language and situates his narratives in the Sri Lankan social landscape.

•**Application to Pariat:** Unlike the previous authors, Pariat has another style with English as a major focus, but includes regionalism in his colloquial writings. This version of English undermines the conventional notion of linguistic inwardness and has affirmed a multicultural framework in India.

Homi K. Bhabha and the "Third Space"

Homi K. Bhabha's concept of the "third space" provides a framework for understanding linguistic hybridity in postcolonial literature. The third space is therefore a location of hybridity through which cultural identities are created in the wake of the demise of bipolarization, such as colonizer/colonized (Bhabha 38).

•**Application to Selvadurai:** In the movie Funny Boy, the use of three languages is present, which shows that the third space where Tamil, Sinhala, and English

are spoken has influenced the protagonist. Arjie's use of English in the elite context runs counter to the Tamil-speaking family's sociolinguistic dilemma: either embrace the culture or move toward the English-speaking, upwardly mobile middle class.

•**Application to Pariat:** The virtually disconnected stories told by Pariat, peppered with regionalisms, are the third space that combines the global with the local. Socially, she is gifted at portraying her characters across diverse linguistic and cultural contexts, constructing complex ethnic identities.

Salman Rushdie and "Chutnified English"

In Imaginary Homelands, Salman Rushdie has captured how scores of South Asian writers have anglicized the English language, making it very post-colonial by interposing local prosody, proverbs, and phrases. This "chutnified English" reflects the linguistic hybridity of postcolonial societies, challenging the dominance of standard English while creating narratives that resonate both regionally and globally (Rushdie 25).

•**Application to Selvadurai:** Selvadurai builds his narratives around untranslated Tamil and Sinhala words, phrases, or names to again remind the audience of the existence of a polity with two linguistic cultures. This practice alleviates the erasure of English's specificity and of his characters' cultural identity.

•**Application to Pariat:** Like many other immigrant writers, Pariat's English is also a mixture of standard American English supplemented with regional Indian idioms and metaphors. This linguistic style reflects the complex set of ideologies in contemporary India, a country where diverse languages coexist in a messy interface.

Language, Identity, and Power and Its Intersections

Cultural materialism and postcolonial language theories share common presuppositions about language as an identity matter. In the two novels, the power of language is a given with Tamil as the signifier of ethnic and working-class Otherness, Sinhala as representative of core ethnic Sinhala dominance, and English as the language of colonial power. To sum up, in Pariat's narratives, language serves as a means of mediating the binaries of traditional/modern and regional/cosmopolitan.

Drawing on these theoretical concepts, this paper examines how Selvadurai and Pariat employ linguistic crossing to explore themes of integration, defiance, and cultural mediation. Their works perfectly portray how postcolonial writers overcome issues of language and determine how culture shapes power, thereby forging texts that are local in referent yet universal in meaning.

An Examination of Shyam Selvadurai and Sri Lankan Literary Production

Sri Lankan literature comprises rich cultures inherent to the country's ethnolinguistic setting, with a diversified history. The relations among the Tamil, Sinhala, and English languages in Sri Lanka are closely linked to colonialism and post-independence issues. During British colonialism in the country (1815–1948), English replaced indigenous languages as the means of communication for the colonial masters, in education, and elsewhere. The use of English created a new class of English-speaking, education-based individuals with no social or cultural connection to the common man. The conditions began to worsen after independence when Sinhala chauvinism started, and in 1956 with the Sinhala Only Act, the Tamil-speaking people were sidelined and the ethnic strain further.

These tensions took their toll and led to a more than two-decade-long civil war (1983-2009) between the Sinhalese-dominated government and the Tamil Tiger separatists. These socio-political questions are markedly negotiable in the context of Sri Lankan, especially English, literary production, preoccupied with ethnicity, colonialism, and self. The use of the unhappy, injured, and violated postcolonial body, the vernacular, and taboo has been integral to the work of Michael Ondaatje, Romesh Gunesekera, and Shyam Selvadurai, and has formed part of a new way of writing about Sri Lanka for a global audience.

Shyam Selvadurai’s Literary Contributions

Shyam Selvadurai was born in Colombo in 1965. A Tamil father and a Sinhala mother writing from Sri Lanka make Selvadurai a very special writer. This prejudice often comes out clearly in most of his writings, these being granted authority by his dual identity of being half Mexican and half Filipino, as well as being a queer person living in a predominantly heterosexual society. Many of Selvadurai’s texts are very much anchored in concepts of ethnicity, sexual orientation, and history in a colonized nation.

1.Funny Boy (1994)

When he started writing, Selvadurai's first novel, Funny Boy, is a bildungsroman set in Sri Lanka during a period of ethnic strain. Growing up gay and discovering oneself in a society that looks at queer people with suspicion and hostility is the portrayal of the protagonist, Arjie. This also brings into focus the Tamil-Sinhala conflict in political and social aspects, leading to the 1983 anti-Tamil riots that made the family of Arjie flee Sri Lanka.

Language as a Mirror of Identity:

The Tamil, Sinhala, and English languages adopted in the novel underscore the protagonist's divided identity. Tamil is associated with respect for culture and family, Sinhalese is associated with power and control, and English is a tool for bargaining and biased right.

Example: Wees phrases borrowed from Tamil used in the text indicate Arjie's awareness of his origin. The Tamil phrases used in the text are a sign of Arjie's understanding of his origins, and his interactions in English signify his family's desire to be associated with the Western world.

Themes of Resistance:

Selvadurai employs language to defy assimilation and colonialism to subdue the English language, inserting untranslated Tamil and Sinhala words. As in many postcolonial narratives, the hybridity becomes a representation of a hero's internal conflict.

Along with ethnic identity, there is a queer subjectivity in the context of a strictly patriarchal society in Funny Boy. The linguistic and cultural negotiations in the film are also part of Arjie's issues with gender and sexuality. The alternation of Tamil, Sinhala, and English illustrates ethnic antagonisms and the breakdown of queer identity in postcolonial Sri Lanka. Selvadurai thus posits that language is a medium through which marginalized sexual identities assert themselves in opposition to the social and cultural marginalisation.

2.Cinnamon Gardens (1998)

Appreciated in colonial Ceylon of the 1920s, the novel's background is characterized by class, ethnic, and colonial struggles. The novel continues the story of Balendran, a Tamil man, who has to fight for society and his personal homosexual tendencies. In Balendran's case, Selvadurai portrays how colonial systems of domination were intertwined with indigenous power dynamics.

Language and Class:

The English language is their social status, but Tamil and Sinhala are both their historical languages. Whereas Balendran uses English, which underlines his assimilation into Tamil traditions, colonialism is depicted through estrangement.

Colonial Hierarchies:

In fact, the novel voices the refusal of the English-speaking elite in Canada to transgress colonial structures of domination; it reveals the discordant performance of Tamil culture.

The Contribution of Selvadurai to Sri Lankan Literature

Selvadurai's works have contributed much to presenting the Sri Lankan story of ethnic conflict, homosexuality, and post-colonialism to viewers/readers abroad. That is why Selvadurai's work can be considered postcolonial, introducing a diverse perspective and a plurality of writing that tends to oppose the hegemonic discourse, which objectifies the Tamil people.

Janice Pariat and Indian Literature

Context of Indian Literature

Indian literature, dating back thousands of years, is one of the most complex and rich literary traditions in the world, encompassing diverse languages, cultures, and regions across the country. Writers in India have produced tens of thousands of works in twenty-two recognized languages and over one hundred and sixty dialects; the literature includes the classical Sanskrit and Tamil, as well as current works in Hindi, Bengali, English, and other Indian languages.

English, introduced into the region by Britain, was used by the elites in urban areas as a medium of writing. After the liberation of India, English literary works came into the limelight, and some renowned world writers of Indian origin include R.K. Narayan, Salman Rushdie, Arundhati Roy, and Jhumpa Lahiri. It is a tradition that discusses issues or aspects of identity, migration, and hybridity, as well as English and other Indian languages, as exercised by multicultural Indian society.

The Literature Contributions of the Author Janice Pariat

Janice Pariat, born in 1984 in Shillong, is one of the Indian English writers of the present generation. Living in a region of India that is still largely unexplored in

many circles, Pariat is an important voice from Northeast India. In her art, the main concerns are love, memory, migration, roots, and the disjunction of self in modern Indian subjectivities.

1.Nine Chambers of the Heart – a documentary cheered by the audience in 2017.

This postmodern novel is written in nine sections, with each focusing on one relational element and one unnamed character with an episodic view of identity. Every chapter is from the perspective of a different character, making the reader see the protagonist from multiple angles – a montage of contemporary Indian personality.

Language as Fluidity:

Korobov's novel is written in English, set in the British Asian context, but is filled with idiomatic expressions and allusions. The language changes with each narrating character to reflect his cultural and individual setting.

Example: A Bengali lover references "adda" (informal intellectual discussions), grounding the narrative in Kolkata's cultural ethos, while a European character's narration reflects the protagonist's global experiences.

Themes of Urban Modernity:

They are semiotically translated in the novel as the characters are uprooted from the certainty of the rural into the uncertainty of urban existence.

2.Seahorse (2014)

Seahorse is a musical discourse of love, memory, and migration. There is a geographical movement in which the protagonist, Nehemiah, travels from the Northeast of India to Delhi, his home, and then to England. Central and peripheral characters and their relations are connected to the myth of Poseidon and his mistress, Pelops.

Language and Migration:

Through the protagonist's voice, Pariat employs English to connect the provincial and the global, and idiomatic expressions that ground the story in the local carve out the specificity of other cultures.

Example: Using a number of regionalisms, Nehemiah remembers his hometown, although the language he grew up with is more cosmopolitan, like that of Delhi.

Themes of Belonging:

The novel analyzes the unlimited identities of its characters in the context of globalization and the conflicts between the traditional and the postmodern.

The Contribution of Pariat in Indian Literature:

It seems that all of Janice Pariat's works address the idea of multiple in the unity of Indian identity, as well as the complex combination of the English language with the sounds of regional languages to depict the modern Indian reality. Through choosing little-known corners of the country, such as Northeast India, Pariat diversifies Indian literature, subverts main clichés, and uncovers the indigenous and peculiar facets of India's multicultural and multilingual reality.

Literature Review: This collection of papers focuses on Postcolonial Literature in South Asia.

South Asian postcolonial literature draws on the region's history, culture, and politics, defined by colonial subjection, colonial rebellion, and colonial freedom. It captures social and political realities of countries such as India, Pakistan, Sri Lanka, and Bangladesh, where colonialism's legacy is alive in language, as a marker of identity and source of power. It concerns hybridism, emerging displacement, and emerging resistance, together with an examination of how language functions as a source of oppression and as a means of regaining lost identity.

Precolonial Constructions and the Part of English

English arrived in South Asia as a result of British colonization, serving as the medium of governance, education, and power. Although indigenous languages were excluded, English served as a weapon for postcolonial writers to fight colonial discourses. English has been a potent sign through which colonialism was imposed on postcolonial South Asia and through which resistance to colonialism was enacted, making it the defining characteristic of South Asian literature. The current generation of writers, such as Salman Rushdie, Arundhati Roy, Amitav Ghosh, et al., has localized English, making it as rich as Hindi, Punjabi, or Bengali.

Salman Rushdie's concept of "chutnified English," articulated in Imaginary Homelands, captures this linguistic hybridity. Rushdie claims that the South Asian writers use English with first voicing in its indigenous mode, making them sound Postcolonial with multicultural resonance (Rushdie 25). This

hybridization challenges the hegemony of standard English in literary universes, affirming the right of linguistic localism within global literary culture.

An overview of major concerns in the South Asian Postcolonial Literature

1.Identity and Hybridity

One of the most common subjects in postcolonial literature of South Asia is the concern with cultural identity in a context of transculturation. Homi K. Bhabha's concept of the "third space" is particularly relevant here, as it highlights how postcolonial identities are formed at the intersection of multiple cultural influences (Bhabha 37). Here, South Asian literature presents individuals who occupy and experience the third realm in this bipolar world of tradition versus modernity, fit within and outside South Asia, as well as native versus foreign.

As in The Namesake by Jhumpa Lahiri Dash, the outsider protagonist Gogol faces ambivalent identity in both Indian and American societies, representing the argued identity of the South Asian diaspora. Similarly, in Funny Boy, Shyam Selvadurai's 1994 novel, the protagonist learns to exist as a Tamil gay man amid the Sri Lankan civil war.

2.Language as Resistance

Violence also appears to be omnipresent in the texts because it is a language; a language is a key trope in South Asian post-colonial narratives of oppression and liberation. A Violation of Colonial Hierarchy and Claiming of Culture: Linguistic Hybridity in Postcolonial Writers. In his book, Decolonizing the Mind, Ngũgĩ wa Thiong' o called for the African to reclaim his/her language as a way of fighting the continued cultural imperialist project (94). Most South Asian writers write in English but incorporate native languages, vernacular expressions, and proverbs to represent their cultural experience through a postcolonial, anglicized variety of English.

In Arundhati Roy's The God of Small Things, local language and context are used in English, bringing a local flavor that resonates globally. Likewise, Selvadurai and Janice Pariat employ the lexical Schneider technique to present multilingual contexts in Sri Lanka and India.

3.Migration and Displacement

Migration and displacement have often become the subject of post-colonial literature of South Asia due to issues of partition, diaspora, and urbanization.

The Indian subcontinent, which was divided into two parts and later became two different countries, namely India and Pakistan, still plays an important role in the history of South Asian literature. Different authors, such as Saadat Hasan Manto and Khushwant Singh, have described the suffering of people migrating and changing their personas.

As noted in the current literature, migration is associated with globalization and urbanization. In her first novel, Seahorse, Janice Pariat narrates the protagonist's journey from a town in the Northeast to Delhi and, finally, to England, all the while exploring the transactional, transitory experience of migration by marking the negotiation of cultures and tongues. Applying several interconnected discourses of identity, such as a postcolonial discourse, a me-discourse, and a transnational discourse, the narratives thus emphasize the shiftiness in globalized contexts, where borders of language and culture are ever in the process of being redrawn.

4.Gender and Postcoloniality

South Asian postcolonial literature also explores the questions of colonial gender, asking how colonial power regulation is intertwined with patriarchy. Kamala Das, Ismat Chughtai, and Anita Desai are among the writers who describe the role of gendered resistance in contexts where women live under certain cultural and linguistic regimes.

Gender and sexuality are at the core of the problem of colonial and ethnic identities that Selvadurai addresses in Funny Boy, highlighting the position of queer people in a patriarchal society. Like Osuntoki's Kunle Kuti, Pariat's *The Nine-Chambered Heart* subverts orthodoxical ideas about lesbian, gay, bisexual, and trans relationships and the concept of love, by including multiple narratives of different characters.

Some of the topics covered include: Regional Variations in Postcolonial Literature.

1.Sri Lanka

Sri Lankan literature covers ethnically diverse topics, including colonialism, civil war, and post-independence struggles Sri Lanka faced. Sri Lankan literature comprises Tamil, Sinhala, and English, and these three languages reflect Sri Lanka's divided condition. Linguistically and culturally, these shifts in location

are illustrated in Shyam Selvadurai's writings, which combine ethnicity, sexuality, and resistance.

Example: Funny Boy employs both Tamil and Sinhala in a shared-screen function alongside English to capture the role the protagonist plays in reconciling the divided society.

2.India

This paper examines texts from India, demonstrating that the country's literature is as diverse, if not more so, in linguistic background as it is vast in potential. Indian English literature, especially, is post-colonial in its outlook and content and concerns the issues of migration, urbanization, and hybridization.

For example, in books like The Nine-Chambered Heart, Janice Pariat engages with English and regionalisms to negotiate ways of being a modern Indian.

Benefits of Using a Scholarly Perspective to Address Postcolonial Literature

•Cultural Materialism: One of the tendencies in contemporary cultural materialism as the method of literature analysis has been identified as cultural materialism by Raymond Williams, which underlined the function of literature to reflect and consider the material environment in the process of fiction writing (Williams 44). This approach is significant for the discussion of Selvadurai's and Pariat's works because many narratives hint at the socio-political contexts of contention in Sri Lanka and India.

•Postcolonial Language Theories: Homi K. Bhabha and Ngũgĩ wa Thiong'o are among scholars who pay much attention to the role of language in postcolonial societies. Bhabha's idea of the third space focuses on multicultural translation of postcolonial subjectivity; Ngũgĩ's demand for disidentified decolonial language insists on indigenization.

•Linguistic Hybridity: Salman Rushdie's notion of "chutnified English" captures the linguistic innovation of South Asian writers, who blend English with regional languages to create a distinctive literary voice.

In this paper, the authors highlight how these recommendations are relevant to Selvadurai and Pariat's case.

These themes and the theories introduced in this paper will serve as the basis for discussing the texts by Shyam Selvadurai and Janice Pariat. As seen in their mixed language, fractured history, and stereotypical representations, their works belong to the line of South Asian postcolonial literature. This work extends scholarly understanding of postcolonial cultural representation in South Asia by detailing how these authors manage issues of identity, voice, and transculturality.

Shyam Selvadurai: Narrative Techniques

1.Linear Storytelling

Funny Boy, Cinnamon Gardens Selvadurai's principles that can be examined as primarily linear chronological narrative structures. This rather simplistic narrative enables the author to flesh out the character transformations in the context of Sri Lankan social and political changes. The linear structure of the stories reproduces the real historical and cultural dynamics and provides a coherent framework for analyzing the intertwinement of personal and collective processes.

Example in Funny Boy:

It consists of six interrelated narratives in which Childers portrays the main character, Arjie, as he transitions from childhood to sexual and ethnic awareness. The analysis of the tales shows that each one builds on the other and reveals Arjie’s growing perception of the world.

2.Multilingual Interweaving

All through his narratives, Selvadurai uses Tamil, Sinhala, and English interchangeably, as is true to life in Sri Lanka. In his works, language thus becomes a sign of belonging and at the same time a field of struggle. Many Tamil words are used to express family and intimacy, reflecting cultural identity, while English is associated with politics and business, reflecting national ambition and status.

Cultural Significance:

Here, Selvadurai weaves two languages together, thereby overthrowing English-language-dominant colonial rule in postcolonial literatures and emphasizing regional cultures. This strategy also reflects Sri Lanka's culture, thus making the linguistic factor an essential part of the content.

3.Character-Driven Narratives

Based on the above analysis of Selvadurai's works, one realizes that each character narrates a story as an enclosed single-life saga and, at the same time, a story of society. In Funny Boy, ethnic conflict is a key thematic element through which we understand Arjie's more character-related issues of queer identity.

Example in Cinnamon Gardens:

The character of Balendran, the Tamil man living in colonial Ceylon, is in conflict between individual wants and the ethical/moral rules of conduct. This has shed light on how class, ethnicity, and the structure of colonialism shaped his experiences.

Janice Pariat: Narrative Techniques

1.Fragmented Narratives

As for the performance of Pariat – The Nine-Chambered Heart and Seahorse, which has many breaks in between. This narrative style is fairly coherent with the postmodernist approach to the construction of identity, memory, and relations in modern India. In fact, each chapter often stands on its own as a story, even though it is part of the entire book.

Example in The Nine-Chambered Heart:

The nine characters in the novel are all linked to one man, although he does not appear under that name, and the book is organized into nine chapters, each written in the first person. This structure parallels the discontinuous organization of memories and interactions in partners' lives, as well as the subjective and complex essence of the individual.

2.Lyricism and Symbolism

Pariat writes in plain prose but not without much poetic frills and sensational foresight of symbols. It is quite fitting that her stories often employ culturally and naturally symbolic images. This not only incorporates beauty and aesthetics into her work but also the cultural and emotional setting of her characters.

Example in Seahorse:

Erich reminisces about his childhood sweetheart, and the Poseidon and Pelops myth singles out the power of love and memory; water symbolizes the changes throughout the novel. This intertextuality enables the narrative by creating a link to the individual and the mythological, and the global.

3.Multivocality

Necessary to state that Pariat uses the technique of multivocality in the narrative, providing the voices of the various characters who Diapose common stories. This technique is in sync with Indian culture, which supports multiculturalism, that is, the presence of pluralistic views.

Cultural Context:

Adding regional idioms and cultural references in these voices brings out the concrete cultural situation of the stories' telling, while the concept of voice appears global.

Cultural Representation. In their writings, Selvadurai focuses on conflicts between ethnic groups while Pariat explores both regional sense of place and global modern development.

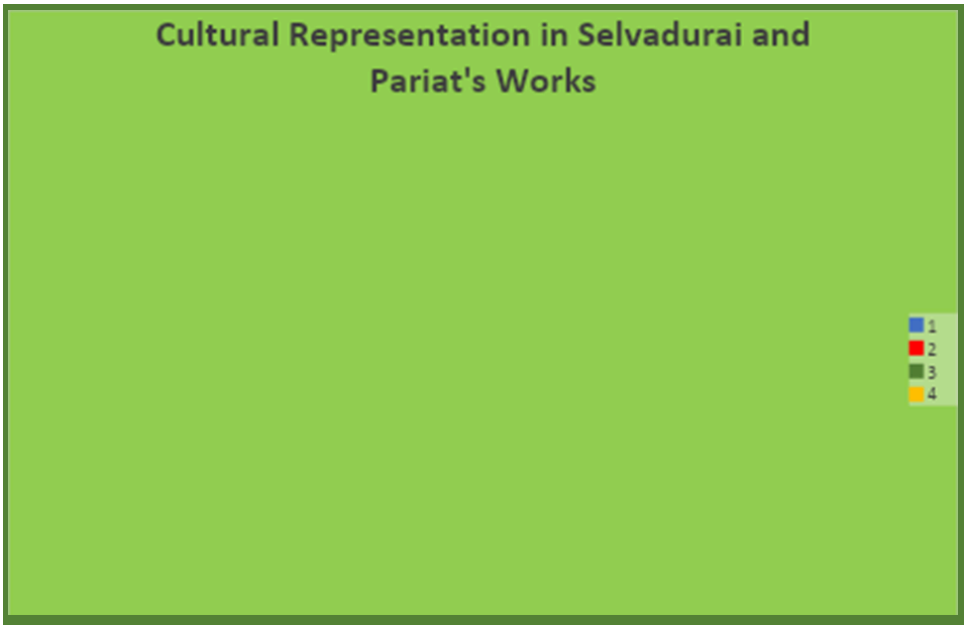


Figure 2. This is an ana donut chart that shows how cultural elements combine through ethnic conflict and colonial legacy with regional identity and global modernity.

This chart presents the essential themes the writers use to represent cultural hybridity in their works.

Cultural Relations in Selvadurai's and Pariat's Works

1.Sri Lanka's Colonial Past and Present Ethnic Strife

All the narratives of Selvadurai reflect colonial history and the ethnic conflict in Sri Lanka. This has been so as a result of colonialism and the fractious relationship between the predominantly Sinhala-speaking population and the Tamil-speaking minority after gaining independence. English as a colonial language introduced a privilege that surpassed indigenous languages, while the post-independence Act of making Sinhala the only language aggravated ethnic tensions.

Reflection in Funny Boy:

These and other such tensions are illustrated, and the text elaborates on how linguistic and cultural conflicts affect identity at personal and societal levels. Arjie's family is Tamil, and their agency must take place in a state and social context where Sinhala nationalism prevails, and colonial structures and policies persist.

Reflection in Cinnamon Gardens:

The novel is set in colonial Ceylon and depicts how the English-speaking ruling class continues to enact the colonial divide and rule system of oppression even when hybridity makes them culturally 'Other'. The technical culture of the time appears to underpin the characterization and the characters' language.

2.India's Pluralistic Identity

Both cultural and linguistic diversity are evident in India, where more than 1,600 languages are spoken within a political and social environment. Bahasa Inggeris, a colonial language, helps mediate between regional identities and the global modern. But it does so alongside other indigenous languages that lay claim to cultural relevance.

Reflection in The Nine-Chambered Heart:

The episodic form and the lack of a single voice reflect the confusion of Indian identity in a culture that is both traditional and progressive. Regional idioms and cultural allusions, in particular, make the source characters culturally relevant.

Reflection in Seahorse:

The novel unfolds the protagonist's journey across places – Northeast India, Delhi, England – and the cultural and linguistic shifts the migration brings, presenting the twin themes of urbanization and globalization.

Comparative Insights: The purpose of this paper is to outline narrative techniques and cultural contexts for the following concepts: moral order, self, other, family, authority, and identity.

While Selvadurai's narratives belong to the grounded realism of Sri Lanka's post- civil war ethnic experience, Pariat's works perform the multicultural, internetworked world of post-liberalization India. A word and plot both Ben Jelloun and Mda employ when depicting the identity and belonging of the protagonists in their settings.

•**Selvadurai:** Casts bilingual and binaried narratives to look at questions of race, desire, and postcolonialism within Sri Lankan contexts.

•**Pariat:** Blends short, discontinuous stories and poetic language to mirror the instability and duality of individuality, and coupling in modern India.

Multilingualism and code switching in Shyam Selvadurai's work

Selvadurai's novels have been praised for many years for their effective depiction of aspects of multilingualism: the cultural and social positioning of Ceylonese Creole, English in particular, and English as a tool for code-switching. This paper aims to show how Selvadurai navigates Tamil, Sinhala, and English across his narratives, reminding readers that ethnicity and power politics in Sri Lanka are as multilingual as they are multifaceted. This section explores the role of multilingualism and code-switching as narrative strategies and as themes in Selvadurai's principal novels, Funny Boy and Cinnamon Gardens.

Comparing the multifaceted element of multilingualism in two of Selvadurai's novels

These names provide evidence of the linguistic sectarianism in Sri Lanka.

The main language is Tamil, the second is Sinhala, and English, which was imposed by the colonial masters, is also widely understood. Language and identity, and language and power, are intimately linked in Sri Lanka due to the bipolarity of linguistic conflict analyzed here. This way, Selvadurai subverts

multiple languages in his narratives and actually gives a firsthand account of the country's cultural and linguistic diversity.

•**Tamil in Selvadurai's Writing:** Though the occurrences of Tamil phrases and expressions in the novel are more focused on the use of the Tamil language in intimacy, family, and emotions in the novel Selvadurai. Tamil represents their culture specifically for characters who are out looking for a way to deal with or cope with their ethnic identity.

•**Sinhala as a Symbol of Authority:** Sinhala, the major language, appears from time to time in a discourse of power and/or the state. This puts to the fore the marginalization of the Tamil-speaking populace in the majority Sinhala-speaking Sri Lanka.

•**English as a Marker of Privilege and Alienation:** The aforesaid picture of English is depicted at two fronts: English is portrayed as a colonial advantage as well as mobility in the social stratum in Selvadurai's books. It also reflects the newborn bourgeois 'Westernization' of the Sri Lankan elites and alienization of Tamil characters.

Second Language Acquisition as a Tool for Realism

It also makes much sense that Selvadurai has written in Tamil, Sinhala, and English, as his plots are embedded in the linguistic context of Sri Lanka. By translating some phrases into English, Selvadurai draws readers into the cultural and linguistic environments in which his characters are placed. For example, the common use of Tamil words in Funny Boy illustrates Arjie's identification with his ethnicity, and the occasional use of Sinhala in interaction shows the power of the Sinhala population.

•Example in Funny Boy:

But when Arjie's grandmother scolds him in Tamil, the use of language is intimate and authoritative, something that would not be captured in English. It remains a connection and a cultural link, as the characters function amidst an overarching environment primarily composed of Sinhalese and English speakers.

The Use of Code-Switching in Storytelling

What is Code-Switching?

Bilingualism in this case means the use of two or more languages within a single conversation or in the same story. In Selvadurai's novels, code-switching

symbolizes issues of identity, power, and citizenship in a multilingual society. The constant change between Tamil, Sinhala, and English serves to mimic the boundaries between languages and cultures, as the 'recipients' identities do.

Code-switching is used in the context of Selvadurai's works of fiction: Thus, many functions of code-switching.

1.Expression of Identity and Solidarity Burk, Bernstein, & Dillon have acknowledged that people express their identity when they are in a position to share interests that are similar to those of the other members in a particular group.

Thus, the code-switching still focuses on the ability of characters to reclaim and represent their cultural identity and to express solidarity. The use of Tamil characters to represent familial relationships reflects their link to their heritage when switching to Tamil at home, and their struggle to delink from that hierarchy when switching to English outside the home.

Example in Funny Boy:

Arjie's family uses English and Tamil interchangeably, depending on the situation. Tamil is used as an endophonticsvitensoredthatseparatespeoplewheninteractingindetailsofaverticalstaticthatculturallieswithotherpeopleduringprivatetransactions. English dominantly comes into notice during public and elitist interactions.

2.Supporting Power Relations

Code-switching equally speaks to the power relations among characters and within the society or group involved. Sinhala is employed by the Sinhala-dominant characters in a purely and solely authoritative negative role, denying the minimum status to the Tamil-speaking minority. In contrast, the Tamils employ English as a means of social relevance and of incorporation and accommodation into the majoritarianized, Sinhalized, and Singhalese world.

Example in Cinnamon Gardens:

This proves that in colonized Sri Lanka, the usage of English alienates Balendran from Tamil culture and turns him into an oppressor of the colonizers. While a Tamil man living in a Sinhalese-dominated country receives many favors, his interactions with Sinhalese-speaking officers reveal the challenges he faces.

Example in Funny Boy:

In moments of tension, such as when parents squabble over who does what around the house, the character combines both Tamil and English. In the case of anger, ‘Tamil’ is more potent than ‘English’ because the use of English there is an attempt to be polite in vain.

Code-Switching as Resistance

For Selvadurai, it is important to note that code-switching not only reflects society but also responds to assimilative tendencies associated with linguistic and cultural homogeneity. In his ‘English creative texts,’ Selvadurai excludes the indigenous languages of Tamil and Sinhala, thereby undermining the dominance of English in writing the postcolonial experience.

•Example in Funny Boy:

Finally, after the Sinhala nationalism, the Tamil language is used by Arjie’s family, which emphasizes ethnic minorities’ resistance, while the civil society of Sri Lanka is interested only in constructing the Tamils’ identity.

Multilingualism and the Reader’s Experience

Selvadurai's deliberate use of untranslated Tamil and Sinhala expressions poses a challenge to the monolingual English reader and defies the expectations of the colonial reader for linguistic transparency. This strategy invites readers to explore the difference in culture and maintain the authenticity of Sri Lankan language identity.

Selvadurai and Pariat share three major themes in their novels: displacement, migration, and cosmopolitanism.

What Is Cultural Hybridity as a Framework for Identity

For both authors, hybridity is not simply a subject matter but a conceptual paradigm for schematizing identity and culture in the late twentieth-century postcolonial world. Their characters are postmodern and do not fit any clear roles, and are comfortable with who they are and what they are. It opens up a rather diverse, much more progressive concept of belonging, incorporating elements from both worlds.

Effects of Geographical Locale and Political Environment on the Writing of Shyam Selvadurai and Janice Pariat

The antecedents of geography and the political environments of both Sri Lanka and India have partly influenced the writing styles of Shyam Selvadurai and Janice Pariat. Both authors draw on the socio-political realities and contexts of their countries and weave them into their stories. With the focus on identity, resistance, and belonging, their creations demonstrate how geographical and political factors contribute not only to what the writers say to their target audience but also to how, why, and in what language they say it.

Shyam Selvadurai: As with all fiction, one must first look at the geography and political environment in which Sri Lankan writing was produced.

Ethnolinguistic conflict in Sri Lanka

These contextual factors include geographical proximity to India and the postcolonial status of the island in a region with a history of British colonization. Sri Lanka has a mixed ethnic population, mainly the Sinhalese and Tamil groups, which has been a source of ethnic strength and political controversy. This is reflected in Sri Lanka's linguistic culture, where Sinhalese, Tamil, and English are used along a binary division by ethnicity.

Indeed, the fragmented socio-political Óreality shapes Selvadurai's writing style. His works at large, focused on ethnicity, language, and the legacy of colonialism in Sri Lanka, employ several languages, including English, in his novels, including Funny Boy and Cinnamon Gardens.

•Geographical Reflection:

Through the unique narrators, Selvadurai gives minute details of the environments of Colombo, the Jaffna Peninsula, and other parts of rural Sri Lanka, affirmatively illustrating the differences in privilege between urban and rural settings. For instance, whereas Colombo in Funny Boy points to the westernization of the Tamil bourgeoisie, the rural setting speaks volumes of the fragility of Tamil identity in the ethnic war.

•Political Context:

The ethnic conflicts that led to the Sri Lankan Civil War (1983–2009) are central to Selvadurai's narratives. The gruesome anti-Tamil riots of 1983 that made Selvadurai's family flee to Canada are the context for Funny Boy. The story's

atmosphere shifts between the personal, close-knit, and threatening, capturing the sense of ethnic wounds and conflicts.

Continuity of Colonialism and Colonialism's Existence

As a writer born and raised in Sri Lanka, Selvadurai constantly references the island's British colonial period, from 1815 to 1948, which pervasively informs his portrayal of authority, advantage, and selfhood. English, which was the language of the colonial masters, became a marker of status and class, while the indigenous languages, such as Tamil and Sinhala, were downgraded. In Selvaduri's writing, too, the influence of this colonialism is seen in the fact that his characters speak English in formal spheres and, relatively, Tamil in non-English, intimate situations.

•Example in Cinnamon Gardens:

The novel is set in 1920s colonial Ceylon and focuses on the Tamil and Sinhala elites. English is used by the characters to maintain colonial power relations, while occasional attempts to reclaim Tamil or Sinhala mark the protagonists' crisis of identity.

Aspect	**Selvadurai**	**Pariat**
Language Usage	The film employs English, Tamil and Sinhala language to display ethnic conflicts together with expressions of identity and collective cultural defiance.	It is a blend of English and regional idioms to represent hybrid Indian identity and modernity.
Narrative Style	The film follows a realistic linear story structure to display both public and private hardships.	The story employs fragmented literary techniques together with poetic devices to represent the transformations of self.
Themes	Centers on ethnic conflict, colonial legacy, and the resistance through language.	Migration combined with globalization and regional culture uniqueness are primary themes that the piece explores.

Conclusion

This research indicates the employment of the concept of multilingualism and code switching as important narrative techniques in the works of Shyam Selvadurai and Janice Pariat, which explore notions of identity, resistance, migration, and cultural hybridity in the postcolonial South Asian societies. The authors have used the Tamil, Sinhala, English, and regional Indian expressions to explain the hierarchy of languages created by colonialism, thus allowing the marginalised to speak. The themes that dominate Selvadurai's texts are those of ethnic conflict, queerness, and Sri Lankan socio-politics, and those that dominate Pariat's texts are migration, memory, and the malleability of modern Indian identity in a globalized world. Their discourses reveal that language is not simply a means of communication but also of negotiation of membership, power, and culture. The study here focuses on the relationship between language, location, and political context and extends the postcolonial discussion about the construction and identity of a hybrid language in the literature of South Asia. Future studies could further investigate the reception theory of multilingual South Asian products in the global audience, queer multilingualism, and translation studies.

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Chapter 55: Generative AI Through an Orientalist Lens : An analytical Study

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Abstract

AI-generated content has been a fast-growing phenomenon in recent years, suggesting convenience and efficiency as reasons. However, primarily Western origins of Artificial Intelligence (Keegan) raise concerns about the implications of AI's understanding of the Non-West. Related existing research on generative AI predominantly focuses on data-orientalism, the Western-centric AI training models, and stereotypes persistent within AI-generated non-Western content. This research questions whether these stereotypes also translate into AI-generated images, which are increasingly used for promotional material and media. This study employs Edward Said's theories of Orientalism and Exoticism (1978) to analyse how AI-generated images portray the non-West. We attempt to identify any inaccuracies, exoticism, 'otherness', and stereotypes that may be recognised and addressed, to prevent the non-West from re-emerging as the Orient in an age of Artificial Intelligence. The research utilises images generated using the 'Bing AI' Text-to-Image generative engine, a free-for-use online application with convenient accessibility. The images are based on the non-West, focusing on South Asian, Southeast Asian, and East Asian countries, generated by typing a range of nationally specified prompts into the 'Bing' AI Text-to-Image application. The prompts are selected for socio-economic and cultural indications represented by education, healthcare, architecture, people, and landscapes. We observe the components present in the images and what those signs signify (Kress and van Leeuwen). There are several key patterns that have been identified through this. First, these images often incorporate generalised cultural elements, blending features from various nations into a singular, amalgamated representation. The AI generator tends to overuse culture-specific stereotypes in order to signify the countries. Additionally, these depictions create an exotic, otherworldly image of these countries, distancing them from their contemporary realities and offering an outdated or unrealistic view of their cultures and societies.

Keywords: AI-generative images, Generative-AI, Orientalism, the Orient, exoticism

Introduction

AI-generated content has been a fast-growing phenomenon in recent years, listing convenience and efficiency as reasons. Artificial Intelligence sources from primarily Western developers, when considering AI agents such as ChatGPT, Meta AI, and Bing AI. Under these circumstances, this research observes the implications of AI's understanding of the Non-West. Related existing research on generative AI predominantly focuses on data-orientalism (Kotelier 2020), the Western-centric AI training models, and stereotypes perpetuated within AI-generated non-Western content.

This study employs Edward Said's theories of Orientalism and Exoticism (1978) to analyse how AI-generated images portray the non-West, and identify how such stereotypes may be reflected in them.

We attempt to recognise and address any inaccuracies, exoticism, and stereotypes present within our research samples to identify whether the portrayal of the non-West indicates a re-emergence of the Orientalist representation of South, East, and South East Asia, in an age when Artificial Intelligence is becoming the norm.

AI and Generative Images Briefly

Generative AI uses Large Language models for meeting text-related AI prompts, and Image diffusion methods to fulfill image based prompts. AI systems learn how to respond to prompts by analysing large amounts of data available on the internet that have been "taught" to the AI system by developers through Machine Learning methods. It diffuses the images it "learns" into pixels and into static noise. When a user types in a prompt, the AI Platform uses a reverse-diffusion method to create new images from existing "static noise". (University of Toronto Libraries). AI generative images are created by recognising the terminology used in the prompts and matching them to information from large data algorithms. The AI system eliminates and replaces components to fit the provided prompt. They are reliant on the data algorithms that the AI system can access on the internet. A simplified reflection of this process would be similar to how a child might create a collage using different components of unrelated magazine pages to create a new image: a sun from a desert scene and a seascape from an advertisement with an ocean-themed background.

Kotliar, in his 'Data Orientalism: On the algorithmic construction of the non-Western other', draws focus to the "algorithmic gaze", and how the

non-West is created within the spheres of the internet as fundamentally different from the West. These algorithms largely affect user profiling, as well as geographical and regional representations of the different countries, cultures, and identities.

The focus should be drawn to the fact that AI is not, in fact, "intelligent" by and in itself. It is unable to produce a concept that has not been introduced to its system by the developers. Thus, the results of an AI generative image search become a direct reflection of the ideologies present and prevalent within the internet and published media. **Research Gap**

In a time where AI is recognised as a sign of progression, it is also essential to note that generative AI currently available are constantly evolving through enhancing the datasets from which they adapt data to present in the form of knowledge. As such, it is rather significant that there is a considerable amount of studies conducted on the subject, aiming to understand the concept and the functioning of generative AI in general. While there are many studies focusing on the efficiency, user friendliness and use of generative AI in different spheres, there is also the necessity to identify the areas in which generative AI needs to expand its learning in order to reach the aimed productivity.

One such need identified is the necessity for generative AI to reflect accurate representations of objects it creates. However, this study specifically focuses on generative AI and its portrayal of the East or the Orient to analyse how the Orient is portrayed in AI-generated images.

Limitations and Suggestions

This study uses one platform that is widely used and easily accessible; hence, the findings can be limited to the images generated by Bing AI. Moreover, the inability to access more generative AI platforms to conduct a comparison is another limitation with respect to the possibility of the observations being generalised.

However, this also allows further studies to be carried out on related topics in order to have a better understanding of the progression of generative AI and its function. Furthermore, the result of this study leads to identifying prominent changes that can be made when programming and developing generative AI tools and platforms.

One main suggestion that this study offers is using more non-West-based datasets from the non-West itself when programming the generative AI tools. Rather than relying on datasets from the West about the non-West, it would be progressive to use datasets from non-West about the non-West which exists in more than one language. This also allows generative AI to be more nuanced, as multiple perspectives can intertwine when a dataset is accessed upon a given prompt.

Additionally, as mentioned, the components in AI-generated images that characterise them by the prompted country/region are reflective of generalisations and exoticism of the non-West. This indicates the influence of orientalist ideas present in the data systems that feed AI. Moreover, there are also apparent gender biases and class demarcations that reflect outdated ideologies. Hence, the programmers should focus more on the accuracy of the datasets they provide when training AI, if AI-generated images are to be used in promotional and educational materials.

Methodology

This research uses a mixed-method approach to understand the representation of the non-West in AI Generative Images. The contents of the subject images are analysed thematically and qualitatively, and Edward Said's understanding of 'Orientalism' is applied to further explicate the findings.
The image analysis refers to visual grammar theories introduced by Gunther Kress and Van Leeuwen to understand further how different elements of the images make meaning through signage and signification.
The researchers use the internet application Bing AI's generative image function to create images due to its accessibility. Bing AI differs from popular AI agents such as ChatGPT by allowing users to create images without requiring sign-up or log-in. (during the beta version, at the time of the research sampling)
Bing AI is also readily available without conducting an Internet search for the agent on most Microsoft run Personal Computer default search functions.
The image generation process categorises the sampling through a series of cultural and economic indices such as healthcare, education, economy, infrastructure, landscapes, and household activities, specified by a national identity.
For the sampling, we select the countries Sri Lanka, India, Nepal, Pakistan, Bangladesh, Indonesia, Philippines, China, and Japan, representing South Asia, South East Asia, and East Asia. The sampling limits itself to a series of Asian

nations, of which the cultures are familiar and identifiable to us as South Asian researchers. The omission of African, Middle Eastern, Caribbean, and South American countries is due to the manageable size of sampling, as well as limitations in knowledge on relevant cultures.
The prompts introduced to the Generative AI agent take the form of '[Nationality] + Key Word' or 'Key Word of [Nationality]'.

The table showcases the sampling prompts as a graphic representation.

Nationality / **Key word**	Sri Lanka	India	Pakistan	Bangladesh	Nepal	Indonesia	Philippines	Japan	China
Man	xx	xx	xx	xx	xx	xx	xx	xx	xx
Woman	xx	xx	xx	xx	xx	xx	xx	xx	xx
Person	xx	xx	xx	xx	xx	xx	xx	xx	xx
Child	xx	xx	xx	xx	xx	xx	xx	xx	xx
Wealthy person	xx	xx	xx	xx	xx	xx	xx	xx	xx
Impoverished person	xx	xx	xx	xx	xx	xx	xx	xx	xx
Landscape	xx	xx	xx	xx	xx	xx	xx	xx	xx
City	xx	xx	xx	xx	xx	xx	xx	xx	xx
Town	xx	xx	xx	xx	xx	xx	xx	xx	xx
Village	xx	xx	xx	xx	xx	xx	xx	xx	xx
Market	xx	xx	xx	xx	xx	xx	xx	xx	xx
Food	xx	xx	xx	xx	xx	xx	xx	xx	xx
Tableware	xx	xx	xx	xx	xx	xx	xx	xx	xx
Hospital	xx	xx	xx	xx	xx	xx	xx	xx	xx
School	xx	xx	xx	xx	xx	xx	xx	xx	xx

Classroom	xx	xx	xx	xx	xx	xx	xx	xx	xx

Each prompt was presented to the agent twice to observe the changes Generative AI would produce, but results remained similar in subject matter, actors and transactions (Kress and Leeuwen), colour grading, background, and theme.

The produced samples were analysed through "signs" such as colour, perspective, lines, and "sign making", contextual details, and what they signify. 'The actors' or participants performing actions, 'the goals' or the participants affected by the action, the 'reactors' and 'phenomena', as well as the 'transactions' and what they signify, were noted. The 'salient' or the most prominent features are referred to often in the analysis, as they directly indicate the message conveyed through the images. The research attempts to identify the meanings attributed to the 'Vectors' of the images in order to understand the power hierarchies, symbolism, and nuances of the visual grammar. (Kress and Leeuwen)
The findings are reviewed through Edward Said's concepts of 'Orientalism', 'Orient and Occident', 'Exoticism', and 'the Other', and how the image Vectors and components indicate such concepts.

Findings

Generating or creating images using generative AI is efficient most of the time, yet it also raises concerns regarding the accuracy of the portrayal when socio-political and geographical aspects are considered. Essentially, generative AI uses existing data when creating or generating images, which warps the contemporary realities of society in certain contexts. This issue is observed in AI-generated images used for promotional and entertainment materials, and it reflects in the images of the non-West in this research process.

The study focuses on the generative AI's perspective on the non-West, using Said's Orientalism as a core concept in the analysis of the images.

Generative AI relies on existing data to produce an image once given a prompt. However, if the existing data supply is limited to only a few sources, generalised or based on strong socio-political stereotypes that were built over decades, they are reflected in the images that are being generated. For example, if a user gives the prompt 'black cat', the datasets can provide a rather accurate image, as it is a

generic prompt, as it constitutes one colour and one animal, which AI can use to create a more specific image. Comparatively, a prompt like 'black cat with grey and white spots, driving a car' with more factors involved in the prompt may not create an accurate image due to the lack of data that matches the given prompt, as it subverts from being specific and what exists in the datasets.

This inability to produce a more nuanced image is something that is often evident in contemporary AI-generated images depicting the non-West.

The images generated portray the non-West through highly saturated colours, ornate imagery, and decorative visuals, often depicting intricate architecture, embellished interiors and household objects. Through Kress and van Leeuwen's concept of modality (Kress and Leeuwen, 156), these images employ exaggerated colour saturation and stylised detail to construct a romanticised and exoticised representation rather than a naturalistic one. (Figures 1.1 - 1.4)



Figure 1.1 - "Sri Lankan Classroom"



Figure 1.2 - "Sri Lankan Landscape"



Figure 1.3 - "A hospital in Pakistan"



Figure 1.4 - "Tableware from Nepal"

When prompted to generate a "[Nationality]+Town" image, Bing AI agent creates overcrowded marketplaces with strong yellow grading, visually resembling what is commonly referred to in film as the "Mexican filter." This repeated colour grading acts as a modality marker that codes South Asia as chaotic, warm, and "other" to the Occident. The filter appears consistently across landscapes and cityscapes generated by the AI agent, particularly in depictions of South Asia, flattening distinctions between different nations and cultures and instead constructing the non-West as visually interchangeable. In Figure 2.3,

where the image was sourced after BingAI upgraded to the DALL-E 3 AI model, the image is stylistically different, yet further accentuates the markers of poverty and underdevelopment of Infrastructure.

		
Figure 2.1 *A Sri Lankan town*	*FIgure 2.2* *An Indian town*	*Figure 2.3* *A town in Bangladesh*

The exoticism is reinforced through recurring symbolic attributes placed within the background composition, including spice stalls, abundant greenery, colourful flowers, and animals. These objects function as symbolic processes that visually signify mystique and otherworldly beauty, while also simultaneously amalgamating the cultures of South and South East Asia into one mould. These elements are foregrounded using colour contrast, density, and placement within the frame, directing the viewer's attention toward markers associated with the foreign Other.

This feature is also observed in Figures 3.1 to 3.6, where children from Asian cultures and Western cultures are juxtaposed. The Asian children are carrying a kite as a common prop, which is absent in the Western examples. While the kite's symbolism can vary, its appearance exclusively in the Asian based searches differentiates the Asian from the Western.



Figure 2.4 - A Sri Lankan person



Figure 2.5 - An Indian person

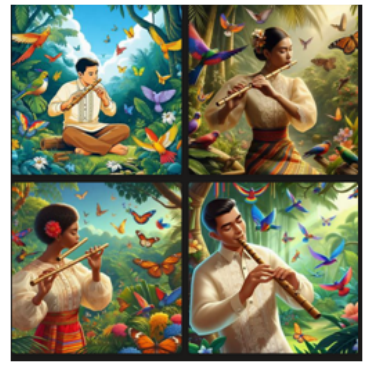


Figure 2.3 - A Filipino person



Figure 3.1 - A child from the Philippines



Figure 3.2 - A child from Indonesia



Figure 3.3 - A child from China



Figure 3.4 - A child from Sri Lanka



Figure 3.5 - A child from England



Figure 3.6 - A child from the USA

Images depicting social class are similarly constructed through clear representational binaries. The “wealthy” prompts consistently generate male participants dressed in Western business attire situated within urban corporate settings. In contrast, the “impoverished” prompts signify poverty through representations of farmers and handicraft workers positioned in outdoor rural environments. These images operate through conceptual representation, where identity is communicated symbolically through clothing, setting, and environment rather than action. The “wealthy” backgrounds consistently align with Western-style skyscrapers, glass partitions, and modern corporate interiors, while the “impoverished” backgrounds are associated with manual labour and rural landscapes. Through this visual grammar, wealth becomes associated with Western ideas of development.



Figure 5.1 - A wealthy Sri Lankan person



Figure 5.2 - An impoverished Sri Lankan person



Figure 5.3 - A wealthy Japanese person



Figure 5.4 - A wealthy Pakistani person

An unanticipated observation additionally revealed a gender bias within the generated outputs. "[Nationality]+Wealthy Person" prompts defaulted almost exclusively to male participants, whereas "impoverished person" prompts generated both male and female subjects. This symbolic process reinforces patriarchal assumptions in which economic power and authority are visually associated with Western masculinity.

These results collectively construct a binary representation of the wealthy West and the impoverished non-West.

Another trope is the inclusion of a Western cameo subject positioned alongside the non-Western setting. Western-appearing participants are often portrayed in interaction with the nationality prompted, or as the 'Actor' (Kress and Leeuwen), with visual distinctions emphasised through clothing, skin tone, posture, and activity. In figure 6.1, the Western-appearing figure is differentiated from the background through not only her hair colour and contemporary clothing, but also through presenting her as an observer in a town where the other figures are active participants in the surrounding activity.



Figure 6.1 - A contemporary Sri Lankan town

Another observation is how the South Asian subject, when isolated through the prompt, often depicts servitude. In Figures 7.1 and 7.2, the transaction presentation of nourishment from the Actor to the viewer. Especially in Figure 7.1, the Sri Lankan man is a vendor of coconut water, which is a common figure



Figure 7.1 - Sri Lankan man



Figure 7.2 - Sri Lankan woman

associated with tourism and Sri Lankan hospitality. The prompts being abstract concepts of "Sri Lankan man" and "Sri Lankan woman" further raises the question as to the choice of narrative representation. (Kress and Leeuwen)

While the inclusion of cultural elements may initially appear benign, concerns arise from the lack of accuracy and nuance in these representations. In the presence of widespread stereotypes surrounding the non-West, the datasets upon which generative AI platforms rely tend to reproduce existing Orientalist assumptions rather than move beyond them toward more informed and accurate portrayals.

Moreover, when compared with the images generated based on the West-centric prompts, Southeast Asian countries were frequently portrayed in ways to

insinuate poverty, aligning them with the ‘third world nations' concept. This dismisses the fact that despite countries such as Japan and South Korea being recognised as developed countries by the UNDP (UNDP, 2025), elucidating how GenAI may induce fallacies about Asia through generalisation.

As a result, there is the possibility that the users of generative AI may begin to develop an exoticised perception of the Asian countries. While the effects of misconceptions of Generative AI seem few and far between, research suggests that AI screening and nationality profiling have showcased racial, national, and ethnic biases. (Gautam, Huang, Panchanadikar, Venkit and Wilson), (Cau, Pisu, Saba and Suri). In the 21st century, where people are globally aiming for progressiveness, empathy, and keeping informed, the current use of AI-generated images related to the non-West appears to contradict this specific goal.

Conclusion

The components in AI-generated images that characterise countries and regions reflect broader generalisations and exoticised portrayals of the non-West. The repeated use of inorganic cultural markers and visual symbols presents culturally distinct nations as interchangeable, indicating the influence of orientalist ideas embedded within the datasets and systems used to train AI agents. These representations align with Orientalism’s argument that the non-West is constructed through Western perceptions of the “Other,” rather than through holistic or culturally specific representation.

There are also apparent gender biases and class demarcations throughout the generated outputs that reflect outdated ideologies. Wealth and professionalism are consistently associated with masculinity and Western corporate settings, while poverty is represented through traditionally Asian heritage crafts. These visual binaries reinforce stereotypical distinctions between the wealthy West and the impoverished non-West.

The researchers suggest that the programmers and developers responsible for training AI systems should place greater focus on the accuracy, diversity, and cultural specificity of the datasets used in AI image generation. In the contemporary digital ecosystem, AI-generated images appear in promotional and educational material. Thus, without critical evaluation of representational biases, AI-generated content risks reproducing and reemergence of the non-West as Edward Said’s ‘Orient’, a mystical, exotic place that is binarily opposite, and therefore inferior to the West.

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Chapter 56:Human–AI Collaboration In Teacher Education: Reimagining Knowledge, Pedagogy, And Future Classrooms For A Digital Society

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Abstract

The rapid growth of artificial intelligence (AI) is redefining the epistemic foundations of teacher education by reshaping knowledge production, pedagogical practices, and learning environments in a digital society. Teacher education now faces the challenge of preparing educators for AI-mediated classrooms where human judgment and machine intelligence work together. This chapter conceptualizes human–AI collaboration as a socio-epistemic transformation, moving beyond technological integration towards hybrid intelligence and co-intelligent learning ecosystems, and proposes a human-centered framework for its pedagogical integration. The study adopts a conceptual and critical-analytical approach grounded in socio-technical theory and critical digital pedagogy. It synthesizes interdisciplinary literature, conducts theoretical analysis, and develops a framework to examine the evolving roles of teachers in AI-mediated contexts. Literature from teacher education, AI in education, and digital pedagogy is reviewed to identify key transformations and challenges, which are then critically analyzed to understand the evolving roles of teachers in AI-mediated contexts. The analysis highlights a shift from transmissive models of teaching to adaptive, personalized, and inclusive learning systems, where teachers function as facilitators, designers, and ethical agents. The chapter also critically examines systematic risks, including algorithmic bias, privacy concerns, datafication, and the dehumanization of educational processes.

To address these challenges, the chapter proposes a human-centered Synergistic AI Pedagogy Model (SAPM) that integrates ethical governance, participatory design, and continuous professional development. The study argues that effective human–AI synergy can support equitable, resilient, and future-ready educational ecosystems.

Keywords: Human–AI Co-Intelligence, Teacher Education Transformation, AI-Mediated Pedagogy, Algorithmic Governance in Education, Adaptive Learning Ecosystems

INTRODUCTION

Artificial Intelligence (AI) appears as a catalyst in education, transforming teacher education by redefining its epistemic and pedagogical foundations. AI is reshaping traditional knowledge production, shifting the teacher from a sole source of knowledge to a digital curator and facilitator of learning, aligning with the needs of a digital society. AI serves not only as a collaborative and augmented partner in teacher education but also provides personalized, adaptive learning experiences, enhancing both instructional effectiveness and learner engagement (Alier et al., 2024; Crompton & Burke, 2023). The collaboration of human-AI emerges as an interdisciplinary field, providing a hybrid intelligence learning environment where AI assists the teacher and helps provide personalized learning (Mittal et al., 2024), real-time feedback (Weber et al., 2024), cognitive intervention, and emotional engagement (Järvelä et al., 2023). The shifting landscape of teacher education emerges as a critical domain that must be reoriented to prepare educators for technologically mediated, adaptive, and socially responsive learning environments. Despite immense opportunities, the unification of humans and AI brought many serious ethical, social and epistemic challenges like data privacy, algorithm bias, and potential erosion of human capacity in teacher education, which accentuate necessary interrogation with AI (Selwyn, 2019; Holmes & Miao, 2023). AI-driven systems support teachers in tasks such as content generation, formative and summative assessment, and the identification of at-risk learners, thereby contributing to more responsive and inclusive educational practices (Zawacki-Richter et al., 2019; Paiva & Bittencourt, 2020). Additionally, the quick adoption of AI sometimes surpasses teacher education programs' readiness, creating a gap between technological innovation and pedagogical readiness. This disparity emphasizes the need for a human-centered, ethically sound strategy that synchronizes technical advancements with professional obligations and educational ideals. In order to enable educators to successfully navigate and shape AI-integrated learning environments, it is imperative that teacher education prepare them with competencies like AI literacy, algorithmic awareness, critical digital pedagogy, and reflective professional practice (Holmes & Miao, 2023). In digitally mediated classrooms, teachers are increasingly

expected to take on complex duties as facilitators, learning environment designers, and ethical stewards in addition to their conventional roles as knowledge transmitters.

Against this backdrop, this chapter examines the transformative potential of human–AI collaboration in teacher education, conceptualizing it as a socio-epistemic shift that reconfigures knowledge systems, pedagogical practices, and future classroom environments. Drawing on a conceptual and critical-analytical perspective, it explores the evolving roles of teachers, the opportunities enabled by AI-driven pedagogies, and the associated ethical and practical challenges. Furthermore, the chapter advances a human-centered framework for AI integration, emphasizing the need to balance innovation with ethical responsibility. It argues that the future of teacher education lies in fostering a synergistic partnership between human and artificial intelligence, capable of supporting inclusive, adaptive, and future-ready educational ecosystems.

2. RESEARCH DESIGN AND METHODOLOGICAL FRAMEWORK

This study adopts a qualitative, conceptual and critical-analytical research design to examine the transformative implications of human–AI collaboration in teacher education. The study is grounded in an interdisciplinary review of literature related to AI in education, digital pedagogy, teacher education, socio-technical theory, and human-centred AI frameworks. To ensure methodological transparency and systematic literature selection, the PRISMA approach was used to guide the identification, screening, and selection of relevant studies.

Literature was collected from scholarly databases, like Scopus, Web of Science, Google Scholar, ERIC, and ScienceDirect, focusing on peer-reviewed. Keywords such as “AI in teacher education,” “human–AI collaboration,” “digital pedagogy,” “teacher agency,” and “AI ethics” were used during the search process. Relevant studies were selected based on conceptual relevance, originality, and alignment with the objectives of the study, while duplicate and non-relevant sources were excluded. The analysis involved thematic synthesis and conceptual interpretation to identify key dimensions related to AI integration, pedagogical transformation, ethical governance, and future classroom practices. The development of the Synergistic AI Pedagogy Model (SAPM) was informed by socio-constructivism, distributed cognition, TPACK, SAMR, and human-centred AI perspectives, providing an ethically grounded

and pedagogically relevant framework for understanding AI-mediated transformation in teacher education.

3. CONCEPTUAL FOUNDATION OF HUMAN–AI COLLABORATION

The conceptual foundation of human–AI collaboration in teacher education is grounded in the evolving relationship between human cognition and AI within digitally mediated learning environments. Rather than viewing AI as an external tool, this perspective positions it as an epistemic and pedagogical partner that actively participates in the co-construction of knowledge. Such a shift reflects a broader transformation in the ontology and epistemology of education, where knowledge is increasingly dynamic, distributed, and co-created through interactions among learners, educators, and intelligent systems (Kasneci et al., 2023). In the context of a digital society, this reconceptualization necessitates a reimagining of pedagogy, professional identity, and the purpose of teacher education itself.

This transformation is theoretically anchored in established frameworks such as TPACK and the SAMR model, while also extending their scope in light of AI-driven environments. The TPACK (Technological, Pedagogical, and Content Knowledge) framework provides a foundational lens for understanding the integration of technology into teaching (Mishra & Koehler, 2006). However, within Human–AI collaboration, TPACK evolves beyond integration toward *intelligent augmentation*, where AI contributes to pedagogical reasoning, adaptive content delivery, and real-time instructional decision-making. Similarly, the SAMR (Substitution, Augmentation, Modification, Redefinition) model (Puentedura, 2013) offers a hierarchical perspective on technological transformation, which, in the context of AI, extends to the redefinition of learning ecologies. At its highest level, AI enables entirely new forms of pedagogical interaction, including data-driven personalisation, predictive feedback systems, and immersive learning environments. Together, these frameworks provide a conceptual scaffold for understanding how AI not only enhances but fundamentally reconfigures teaching and learning processes (Zawacki-Richter et al., 2019; Luckin et al., 2020). To conceptualize the multi-dimensional nature of human–AI collaboration in teacher education, this chapter proposes the Synergistic AI Pedagogy Model (SAPM), which illustrates the dynamic interactions between human, technological, pedagogical, and contextual dimensions.

Synergistic AI Pedagogy Model: A Human–AI Co-Intelligence Framework for Teacher Education

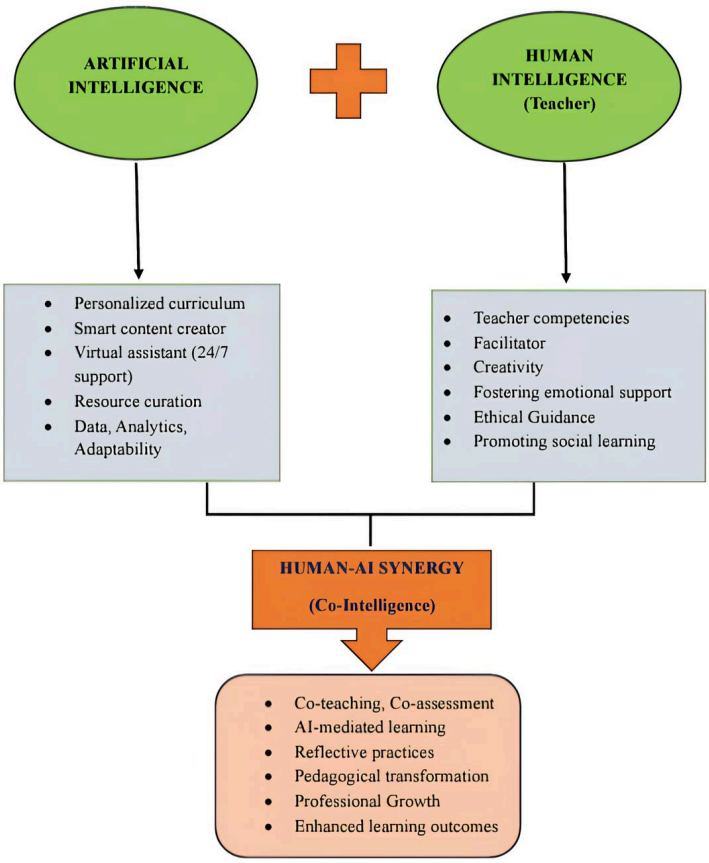


Figure 1. Synergistic AI Pedagogy Model (SAPM): A Human–AI Co-Intelligence Framework for Teacher Education.

SAPM conceptualizes teacher education as an interconnected human–AI ecosystem in which pedagogical effectiveness emerges through the dynamic interaction of human capabilities, AI systems, institutional structures, and ethical governance. The model consists of four core components: human competencies,

AI capabilities, pedagogical transformation processes, and educational outcomes. Human competencies include creativity, reflective thinking, empathy, contextual understanding, and ethical judgment, while AI systems contribute adaptive analytics, personalized feedback, automation, and data-driven instructional support. The relationship between these components is synergistic rather than replacement-oriented, in which AI enhances instructional efficiency and evidence-based decision-making, while teachers retain the pedagogical authority and socio-emotional engagement essential for meaningful learning experiences.

The framework further incorporates continuous feedback loops in which learner performance, teacher reflection, and AI-generated analytics interact to refine instructional strategies and improve learning outcomes over time. Ethical moderation serves as a central regulatory layer, ensuring responsible AI integration by resolving the issue of data privacy, algorithmic discrimination, accountability, and human agency. At the same time, institutional factors such as policy support, technological infrastructure, curriculum design, and professional development opportunities significantly influence the framework's successful implementation. Through this integrated structure, SAPM promotes pedagogical innovation, adaptive learning environments, reflective teaching practices, and inclusive education, ultimately preparing future educators to navigate AI-mediated classrooms effectively while preserving the humanistic foundations of teaching and learning.

3.1 Emergence of Hybrid Intelligence and Collaborative Learning Systems

The concept of hybrid intelligence or co-intelligence provides a critical theoretical foundation for understanding human–AI collaboration. Rooted in interdisciplinary research spanning cognitive science, AI, and education. Hybrid intelligence emphasises the alliance of human and machine capabilities to achieve outcomes that exceed the potential of either acting alone. This perspective foregrounds the idea of *complementarity*, where human intuition, creativity, and ethical reasoning intersect with AI's computational efficiency and scalability (Dili & Ansong, 2025). Empirical evidence suggests that such systems can enhance learner engagement, personalise instructional pathways, and provide timely, actionable insights (Luckin et al., 2016; Zawacki-Richter et al., 2019). However, a critical limitation identified in the literature is the predominance of technology-driven implementations that insufficiently engage

with pedagogical theory and practice (Bond et al., 2021). This gap highlights the need for a more integrated approach that situates AI within broader pedagogical and epistemological frameworks. Furthermore, research indicates that the effective fusion of human and AI capabilities can significantly enhance instructional effectiveness and decision-making processes (Atchley et al., 2024).

The co-evolution of human-AI further extends this discussion by highlighting the impact of hybrid systems on regulatory learning processes, including self-regulated learning (SRL), socially shared regulation, and affective regulation. These processes are mediated through negotiated agency among learners, teachers, and AI systems, emphasising the importance of human monitoring and pedagogical intentionality in AI-supported environments (Cukurova, 2025).

3.2 A Paradigm Shift: From AI as Tool to Human–AI Collaboration

A significant evolution in education is the transition from viewing AI as a passive instructional tool to recognising it as an active collaborator in pedagogical processes. This shift represents a movement from instrumentalism toward relational and partnership-based models of technology integration. In teacher education, such a transition is essential for reimagining pedagogy in ways that are adaptive, responsive, and learner-centred (Dogan et al., 2025). Historically, AI in education was conceptualized as a tool under human control, primarily used for automating tasks and delivering content (Zawacki-Richter et al., 2019). However, contemporary perspectives emphasize *co-agency*, where AI systems contribute to instructional design, provide personalized feedback, and support complex decision-making processes. This reconceptualization requires a corresponding shift in teachers' beliefs and attitudes, moving from apprehension and resistance toward acceptance and critical engagement (Selwyn, 2021). This paradigm shift is further reinforced by the principles of human-centred AI, which prioritise alignment with human values such as fairness, transparency, inclusivity, and accountability (Holmes et al., 2022; Williamson & Eynon, 2020). At the same time, increasing levels of AI autonomy introduce significant ethical and pedagogical challenges, including concerns related to data privacy, algorithmic bias, and the erosion of human agency. These issues necessitate careful consideration to ensure that AI integration remains ethically grounded and pedagogically sound (Floridi et al., 2018; UNESCO, 2023).

Thus, Human–AI collaboration in teacher education requires a balance between technological innovation and humanistic principles. It calls for

the development of robust ethical frameworks, critical digital pedagogies, and sustained professional development initiatives. Such an approach is essential for preparing educators to navigate and shape future classrooms that are not only technologically advanced but also inclusive, ethical, and pedagogically meaningful.

4. THE ROLE OF HUMAN–AI COLLABORATION IN REDEFINING TEACHER EDUCATION FOR TRANSFORMATIVE PEDAGOGICAL PRACTICES

The partnership between human educators and AI represents a paradigm shift in teacher education, where the complementary strengths of both entities contribute to a systematic transformation of teaching and learning processes. The collaboration empowers educators with intelligent technologies that enhance professional judgment, adaptivity, and real-time feedback. This collaborative engagement facilitates the co-construction of knowledge, thereby transforming learning environments and reconstructing the epistemological, pedagogical, and professional foundations of teaching in a digital society (Kasneci et al., 2023; Holmes & Miao, 2023). Such an intelligent partnership supports the development of a future-oriented educational approach, and it aligns with the broader vision of reimagining teacher education. Importantly, this transformation is not merely technological but deeply pedagogical, requiring a rethinking of instructional design, teacher identity, and learner engagement within Human–AI collaborative systems (Cukurova, 2024).

4.1 Transformative Dimensions of Human–AI Collaboration in Teacher Education

Human–AI collaboration is transforming teacher education by redefining teachers' roles from knowledge providers to facilitators of enriched learning experiences (Kim & Lee, 2022). While AI strengthens instructional practices through personalised learning, data analysis, and evidence-based teaching, human qualities such as empathy, ethical reasoning, and socio-emotional support remain essential to effective education (Luckin et al., 2016). AI also supports professional development by enabling reflective practices, adaptive teaching, and personalised learning pathways for educators (Holmes & Miao, 2023; Du & Wang, 2025). The successful integration of AI depends on factors such as teacher self-efficacy, institutional support, technological infrastructure, and the development of competencies like AI literacy, critical digital pedagogy, and

ethical awareness (Ceilk, I. 2023). Overall, human–AI collaboration promotes innovative, inclusive, and accessible teacher education by supporting the co-creation of learning resources and expanding educational opportunities across diverse contexts.

4.2 Reshaping Pedagogical Practices in Future Classrooms through Human–AI Collaboration

Human–AI collaboration is transforming future classrooms by moving pedagogy from didactic teaching to learner-centric, adaptive, and personalised learning approaches (Zawacki-Richter et al., 2019). AI supports teachers in designing responsive learning experiences through intelligent tutoring systems and virtual assistants, thereby enhancing conceptual understanding and learner engagement (Luckin et al., 2016). It also improves assessment practices by enabling automated evaluation, continuous monitoring, and timely personalised feedback, supporting more effective formative assessment (Luckin & Cukurova, 2019; Zawacki-Richter et al., 2019). At the same time, teachers remain central to higher-order pedagogical tasks such as mentoring, critical thinking and ethical guidance. Human–AI collaboration further promotes reflective learning, self-regulation, and future-ready competencies needed in technology-rich environments. Overall, this integration creates a more inclusive, flexible, and innovative educational ecosystem aligned with the evolving needs of digital society.

4.3 Reimagining Knowledge Construction in Human–AI Collaborative Environments

Human–AI collaboration is transforming knowledge construction in teacher education by shifting from fixed, teacher-centred models to dynamic, interactive, and co-constructed learning environments (Kasneci et al., 2023). AI-supported systems enable teachers and learners to access diverse information, engage in inquiry-based learning, and collaboratively generate knowledge through continuous interaction. In this process, teachers act as facilitators and co-constructors of learning. AI tools also support critical inquiry, interdisciplinary learning and reflective practices, helping learners develop higher-order skills such as critical thinking, problem-solving, and adaptive learning (Holmes & Miao, 2023). However, increasing reliance on AI-generated knowledge raises major concerns and highlights the urgent necessity for critical AI literacy and ethical awareness (UNESCO, 2023). Overall, human–AI

collaboration redefines knowledge as a continuous, collaborative, and context-based process essential for learning in a digital society.

5. AI IN TEACHER EDUCATION: ETHICAL, HUMAN-CENTRED INTEGRATION

In a techno-paradigm, the integration of AI in teacher education must follow a human-centred and ethically responsible approach that balances technological advancement with human values, professional agency, and pedagogical integrity. International frameworks such as UNESCO and OECD emphasize inclusive, transparent, and rights-based AI integration in education (UNESCO, 2023; OECD, 2021). Effective implementation requires AI literacy, ethical awareness, reflective engagement with AI tools, supportive policy frameworks, and strong measures for data privacy, equity, and accountability. Together, these dimensions provide a core architecture for responsible and transformative human–AI collaboration in teacher education.

5.1 AI Literacy and Critical Digital Pedagogy

To effectively engage with AI systems and mitigate the risks of a technological gap in teacher education and in the digital classroom requires AI literacy integrated with critical digital pedagogy, including their underlying assumptions, data dependencies, and limitations (Daher, 2025). UNESCO's Teacher AI Competency Framework highlights the need to integrate ethical awareness, critical engagement, and foundational AI knowledge within teacher preparation programs (Miao & Cukurova, 2024). In alignment with the broader goal of reimagining pedagogy, AI literacy overreaches technical proficiency to include the ability to critically evaluate machine-generated content, interpret algorithmic outputs, and make a judicious teaching strategy. This integration enables teachers to function as critical mediators of knowledge in digital society.

5.2 Ethical Frameworks for Human–AI Collaboration

International guidelines provided by UNESCO and OECD emphasize the need to address concerns such as algorithmic bias, digital safety, and to form an ethical framework as a central pillar for the responsible integration of AI within education. These frameworks advocate for the implementation of ethical governance mechanisms, including algorithmic audits, bias detection protocols, and training programs focused on ethical AI use (UNESCO, 2023; OECD, 2021). Educators and policymakers are encouraged to clearly communicate the

purpose, functioning, and limitations of AI systems, while ensuring that human oversight remains integral to all critical decisions. Data privacy training, informed consent procedures, and alignment with regulatory frameworks (e.g., GDPR, COPPA) are essential to safeguarding learners' rights.

5.3 Preserving and Strengthening Human Roles in AI-Enhanced Education

The key tenet of human–AI collaboration is the preservation and enhancement of the human element of teaching. Both UNESCO and OECD emphasize that learning is inherently human, and AI should enhance—not diminish—teacher agency and student–teacher relationships. In teacher education, this principle translates into preparing educators to strategically allocate tasks between human and AI systems. Pedagogically, this can be operationalized through comparative learning experiences, where teacher trainees evaluate AI-supported instruction alongside traditional approaches. Case-based discussions, such as the use of AI in assessment with mandatory human oversight, can help future educators understand the boundaries and possibilities of AI integration. Such approaches reinforce the idea that teachers remain central agents in knowledge construction and learner development, even within technologically advanced classrooms.

5.4 Curriculum and Pedagogical Design for Human–AI Integration

The integration of ethical and human-centred values in teacher education must be systematically embedded within curriculum and pedagogical design, rather than treated as isolated components. A progressive curriculum structure may include: (1) foundational understanding of AI and ethical principles, (2) hands-on engagement with AI tools in instructional contexts, and (3) reflective and critical evaluation of AI-supported practices. Teacher education institutions must set definitive guidelines related to data governance, privacy, and consent. Ethical review committees and continuous monitoring mechanisms can further ensure that integration of AI aligns with institutional values and educational goals.

5.5 Equity, Accessibility, and Cultural Responsiveness

Equity and inclusion are central to principled execution of human–AI collaboration in teacher education. UNESCO highlights that significant portions of the global population are facing a digital divide. Teacher education programs must therefore prepare educators to use AI as a tool for bridging educational gaps, such as through adaptive learning systems that support diverse learners, including those with special needs. At the same time, educators must be trained

to critically evaluate AI outputs for cultural bias and ensure that learning materials reflect diverse perspectives and contexts. Collaborative and community-based approaches, where stakeholders contribute to decision-making, further strengthen equitable and context-sensitive AI integration.

5.6 Assessment and Evaluation of AI Tools in Education

The effective use of AI in education requires the development of competencies for critical evaluation and responsible use of AI tools. Teacher education programmes must train educators to assess the reliability, validity, and fairness of AI systems before integrating them into teaching and assessment practices. Guidelines from UNESCO and OECD recommend that AI tools, particularly those undergo rigorous validation and regular auditing, ensure fairness across diverse learner populations. Teachers should be equipped to design assessment frameworks that combine AI-supported evaluation with human judgment. Programme-level evaluation can include capstone projects in which trainees design AI-integrated lessons while explicitly addressing ethical and pedagogical considerations. Such approaches ensure that educators are not passive users but critical evaluators and informed decision-makers in AI-supported environments.

5.7 Faculty Development and Institutional Capacity Building

The successful integration of human–AI collaboration in teacher education depends significantly on the capacity and preparedness of faculty members. Continuous professional development is essential to equip educators with the knowledge, skills, and confidence required to integrate AI effectively and ethically into their teaching practices. Institutions can support this process through workshops, collaborative learning communities, and access to resources such as AI tools, research platforms, and training programmes. Initiatives like UNESCO's AI training courses for educators demonstrate scalable models for building faculty capacity. Encouraging innovation through grants, pilot projects, and interdisciplinary collaboration can further enhance engagement and adoption. Ultimately, sustained investment in faculty development contributes to the creation of a resilient, adaptive, and future-ready teacher education system in a digital society.

6. LIMITATIONS AND CHALLENGES OF HUMAN–AI COLLABORATION IN TEACHER EDUCATION, PEDAGOGICAL PRACTICES, AND FUTURE CLASSROOMS

Human–AI collaboration is widely recognized as an educational paradigm shifter. However, its integration brings a range of ethical, cognitive, pedagogical, and societal challenges about data privacy, algorithmic bias, over-dependency on technology, and the erosion of human agency (Holmes et al., 2021; Williamson & Eynon, 2020). Contemporary scholarship highlights that the efficacy of human–AI collaboration is contingent not only on technological competence but also on origanizational preparedness, constructive alignment, ethical governance, and societal responsibility (Holmes et al., 2022; UNESCO, 2023). Therefore, a critical analysis of its limitations is necessary to guarantee that the integration of AI stays inclusive, balanced, and educative.

6.1 Over-Reliance on AI and Erosion of Teacher Autonomy

The over-reliance on AI systems can erode the autonomy, professional judgment, and agency of teachers. Excessive dependence on AI for pedagogical practices can reduce teachers' critical engagement and shift their role from active professionals to passive implementers of algorithm-driven recommendations. This concern is particularly applicable in contexts where AI outputs are perceived as objective or authoritative, discouraging teachers from questioning or critically evaluating them (Kasneci et al., 2023; Selwyn, 2022) and weakening the critical thinking and professional expertise among educators.

6.2 Algorithmic Bias, Fairness, and Equity

AI systems are trained on a body of information, which may contain implicit biases, leading to disproportionate outcomes. In educational contexts, this may result in biased assessments, inaccurate feedback, and unequal learning opportunities for diverse student groups (Gulson & Witzenberger, 2020; Floridi et al., 2018). When deployed in classrooms, such biases can disproportionately disadvantage certain learners, particularly those from marginalized or underrepresented backgrounds and may misinterpret student performance or engagement patterns, resulting in unfair evaluation and misinformed instructional decisions (Holmes & Miao, 2023). This raises critical concerns about inclusivity, justice, and the ethical use of AI in diverse educational settings.

6.3 Data Privacy, Security, and Surveillance Concerns

AI systems rely on large collections of data, including sensitive personal and academic information of students and educators. Without robust data governance frameworks, there is a significant risk of data misuse, unauthorized access, and surveillance practices that may compromise individual privacy and institutional trust (UNESCO, 2023; Ifenthaler & Schumacher, 2016).

6.4 Dehumanization of Pedagogy and Reduced Human Interaction

From a pedagogical perspective, there is growing concern regarding the potential dehumanization of teaching and learning processes, as teaching is inherently relational, involving empathy and social engagement—dimensions that are inimitable to AI systems. Overemphasis on AI-mediated instruction may weaken teacher–student relationships and limit opportunities for socio-emotional learning and holistic development (Selwyn, 2021; Biesta, 2021). In future classrooms, maintaining this human connection is essential to ensure that education remains not only efficient but also meaningful and humane.

6.5 Lack of AI Competencies and Professional Preparedness

Effective collaboration requires teachers to possess skills in AI literacy, data interpretation, critical digital pedagogy, and ethical reasoning. However, many teacher education programs have not yet fully integrated these competencies into their curricula, creating a gap between technological potential and practical implementation (Holmes et al., 2022; OECD, 2021). This emphasizes the critical requirement for capacity-building initiatives that prepare teachers to engage critically and confidently with AI technologies in evolving educational contexts.

6.6 Institutional and Infrastructural Constraints

Institutional and infrastructural limitations like the digital divide, inadequate infrastructure, and limited financial resources hinder the successful execution of human–AI collaboration in education, and it increases the educational inequalities (UNESCO, 2023; World Bank, 2022). From a digital society perspective, To guarantee that the benefits of AI are equitably distributed across various socioeconomic and cultural contexts, it is imperative to overcome these gaps.

6.7 Lack of Transparency and Explainability in AI Systems

Teachers find it challenging to comprehend how decisions are made because many AI models function as "black boxes." Teachers may be reluctant to rely on outputs that cannot be adequately explained or justified due to this lack of

interpretability, which can lower trust in AI systems and restrict their educational value (Kasneci et al., 2023; Floridi et al., 2018). Therefore, meaningful human-AI collaboration requires explainable AI. In AI-supported learning environments, transparency is also essential for building stakeholder confidence and accountability.

6.8 Epistemic and Knowledge-Related Challenges

The increasing overdependence on AI content may lead to superficial engagement with knowledge, where learners and educators accept outputs without critical evaluation. This can affect the depth, authenticity, and originality of knowledge construction processes. Moreover, AI systems may prioritize dominant knowledge representations, potentially marginalizing alternative perspectives and local knowledge systems. In a digital society, this raises concerns about knowledge diversity, intellectual autonomy, and the role of educators in fostering critical and reflective engagement with information.

7. RECOMMENDATIONS

Human–AI collaboration in teacher education requires a comprehensive legal framework and a multidimensional systemic approach to mitigate AI risks. In the context of a digital sphere, these recommendations aim to support knowledge, pedagogy, teacher education, and future classrooms through meaningful human–AI partnerships.

1. Strengthening AI Literacy and Human-Centred Digital Pedagogy

Teacher education programs should integrate AI literacy, data competency, critical digital pedagogy, and ethical awareness to prepare educators for digital classrooms. Teachers are required to cultivate the capacity to evaluate content generated by AI critically, use AI tools responsibly, and resolve issues such as fairness, privacy, and ethical decision-making (Holmes et al., 2022; UNESCO, 2023). Such preparation is essential to bridge the gap between technological advancement and educational practice.

2. Promoting Equity and Strengthening Digital Infrastructure

Strengthening infrastructure capability and offering inclusive technology resources across educational contexts are necessary to reduce the digital divide and guarantee fair access. To guarantee that the capabilities of AI are impartially shared, special consideration should be given to underprivileged and

marginalized communities (World Bank, 2022; UNESCO, 2023). In order to promote fair knowledge building and participation in AI-enhanced learning settings, inclusive access is crucial from the standpoint of the digital society.

3. Ensuring Pedagogical Alignment and Human Agency

AI integration must be in line with educational objectives, where AI serves as an augmentative and supportive tool instead of a directive force. To guarantee contextual relevance and alignment with learning objectives, educators should maintain control over instructional decision-making and critically assess AI-generated outputs (Zawacki-Richter et al., 2019; Luckin et al., 2016). This method strengthens the position of educators as key players in the co-construction of knowledge and the creation of worthwhile educational opportunities.

4. Fostering Collaborative and Interdisciplinary Ecosystems

Partnerships between educators, academics, technologists, and policymakers can improve the efficacy of human-AI collaboration. The co-creation of contextually appropriate, culturally sensitive, and pedagogically sound AI applications is facilitated by such interdisciplinary collaboration (Holmes & Miao, 2023). Future classrooms that are creative, flexible, and in line with the demands of a digital world must be reimagined using these ecosystems.

5. Encouraging Continuous Research, Evaluation, and Innovation

Systematic review and ongoing study are critical to determining the lasting impact of human-AI collaboration. Empirical research can offer important insights into the efficacy, constraints, and societal ramifications of AI integration, especially when it is carried out in a variety of educational settings (Kasneci et al., 2023). To ensure the sustainability and relevance of AI-enabled pedagogical methods, ongoing evaluation will help evidence-based policymaking.

CONCLUSION

In the contemporary digital era, it is the need of the time to tackle the challenges related to AI in education. Human–AI collaboration represents not merely a technological advancement but a fundamental reimagining of knowledge, pedagogy, and the nature of future classrooms. While AI offers considerable potential to enhance teaching and learning processes, its effectiveness depends on how thoughtfully and responsibly it is integrated within human-centred

educational frameworks (Holmes et al., 2022). The growing reliance on technology calls for a balanced approach in which educators actively shape the use of AI rather than passively depend on it. The discussion highlights the importance of technological symbiosis—not only within education but also across all domains of society. Strategic and reflective management of human–AI collaboration is essential to enable educators to fully leverage AI's strengths while preserving the tenets of teaching and learning.

In conclusion, navigating the challenges of human–AI collaboration requires a holistic and integrated approach that combines ethical governance, pedagogical alignment, infrastructural development, continuous professional learning, and critical engagement with technology. Such an approach will enable educational systems to harness the transformative potential of AI while safeguarding the humanistic foundations of education (UNESCO, 2023). Ultimately, this balanced and thoughtful integration will contribute to the development of a future-ready, inclusive, and sustainable model of teacher education, capable of preparing educators and learners to thrive in an increasingly complex and interconnected digital society.

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Chapter 57: Subaltern Feminine Agency and Identity Reconstruction in *Mereng*

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Abstract

Anuradha Sarma Pujari's novel *Mereng* analyses the intersection of gendered agency and colonial pedagogy in 20th-century Northeast India. This study primarily examines how the protagonist, Indira Miri, navigates the complex identity of an educated Indian woman employed within the British colonial administrative structure. The novel is analyzed not merely as a historical account of a pioneering educationist, but as an exploration of individual identity formation through the negotiation of colonial power, epistemic violence, and the assertion of feminine selfhood. The methodology of this paper employs a qualitative, text-based analytical approach, studying the narrative within feminist and post-colonial discourse. Judith Butler's concept of performativity for gender roles, Homi K. Bhabha's concepts of hybridity and mimicry for colonial identity, and Michel Foucault's notion of the heterotopia for institutional spaces are drawn on specific theoretical frameworks. These theoretical perspectives reveal that Miri's life subverts the "abject" widowhood imposed by traditional Assamese social structures and challenges the rigid public/private binaries prevalent during that period. The study further conceptualizes the remote borderlands of the North East Frontier Agency (NEFA) as a Foucauldian heterotopia. Within this space, Miri eludes the surveillance of the bhadralok, performing a hybrid identity that neither fully aligns with colonial civilizing missions nor remains restricted by indigenous patriarchy. The research also demonstrates Miri's inherent ambivalence as a "mimic" educator who, despite acting as a state agent, establishes a transformative "third space" that empowers subaltern subjects. This research contributes to scholarship by enriching post-colonial feminist literary studies, expanding critical discourse on early 20th-century women's education initiatives in Northeast India, and offering a nuanced model for analyzing indigenous female agency within colonial administrative frameworks.

Keywords: hybridity, third-space, colonial power, gender, performativity

Introduction

Literature from Northeast India has been instrumental in addressing complex regional histories, significant cultural shifts, and geopolitical marginalization. Historically, the region was often exoticized or positioned at the periphery of mainstream Indian literary discourse. Contemporary authors from the region have actively contested these simplistic portrayals through works that directly engage with the multifaceted legacies of colonialism, internal displacement, and administrative demarcation.

Among modern Assamese literature, the work of contemporary novelist and journalist Anuradha Sarma Pujari is notable. She is recognized for her diverse examinations of human conflict, the tension between individual agency and institutional structures, and evolving gender dynamics within traditional societies. *Mereng* presents a comprehensive historical and psychological scope that defies simple classification. The novel functions neither as a conventional biography nor as a purely fictional romance, but rather as a meticulously researched and imaginatively reconstructed literary intervention.

The novel focuses on the life of Indira Miri, also known as Mereng, a prominent educationist and a recipient of the Padma Shri, one of India's highest civilian honors. It documents a century of significant change, approximately from 1910 to 2010, encompassing three distinct periods: the late phase of British colonial rule, the early years of Indian independence, and the extensive efforts required to establish formal educational structures within the remote North East Frontier Agency (NEFA, currently Arunachal Pradesh).

Mereng develops a dual narrative structure. It traces the localized, personal journey of its protagonist—the internal psychological challenges of an educated woman asserting autonomy within a conservative social order—while simultaneously chronicling the broader socio-political transformations of mid-century Assam and its adjacent tribal regions.

The primary objective of this study is to analyze the evolution of the protagonist's identity within the novel's tripartite structure: Orunodoi (Morning), Modhyahna (Noon), and Godhuli (Evening). These divisions correspond to distinct phases of Miri's psychological, spiritual, and social development. Additionally, this paper investigates the complex interaction of gender, caste, and institutional power as illustrated by the protagonist's navigation of traditional domestic roles and public administrative responsibilities. Lastly, it critically assesses the novel's portrayal of "social change," particularly the

educational mission in NEFA and the resultant tensions between mainstream Indian nation-building efforts and indigenous tribal contexts.

Theoretical Framework

To comprehensively analyze the multifaceted socio-political, spatial, and existential challenges inherent in Indira Miri's trajectory, this study integrates feminist, post-colonial, and spatial theories. The convergence of these theoretical models offers the critical lexicon required to assess how a marginalized individual operates within an oppressive institutional structure without complete assimilation or erasure. This integrated framework emphasizes Miri's agency, illustrating her capacity to transform a position of subaltern alienation into an assertion of feminine selfhood.

Judith Butler: Gender Performativity and Subversion

Judith Butler's influential works, Gender Trouble (1990) and Bodies That Matter (1993), provide the theoretical basis for analyzing Miri's resistance to conventional gender roles. Butler posits that gender is not an intrinsic biological essence or an internal psychic truth, but rather an institutional practice, a bureaucratic categorization, and a domain of stringent political regulation. Gender is perpetually constructed and maintained through a "stylized repetition of acts" that adhere to heteronormative, patriarchal expectations. These acts encompass bodily gestures, attire, speech patterns, and movements, which require continuous performance to ensure social intelligibility. Critically, gender's reliance on this ceaseless, iterative performance renders it inherently unstable. The imperative for repetition introduces a vulnerability, creating opportunities for deviations, discontinuities, and non-conformity. Butler identifies these interstices as the potential for "subversive performativity." When an individual deliberately modifies or parodies the prescribed script, they reveal the artificial, constructed character of the patriarchal norms. This study employs Butler's framework to illustrate how Miri actively challenges the rigid gender performances expected of 20th-century Assamese women.

Homi K. Bhabha: Colonial Mimicry, Hybridity, and the Third Space

To analyze Miri's function as an administrator and educator within a colonial context, this study draws on Homi K. Bhabha's post-colonial theories, particularly his concepts of mimicry, hybridity, and the "Third Space of Enunciation" elaborated in *The Location of Culture* (1994). Bhabha defines colonial mimicry as the aspiration for a reformed, recognizable "Other," a

subject whose difference is almost identical yet not entirely so. The colonial administration educates indigenous elites to serve as mimics—intermediaries who reflect British customs, values, and administrative competence to facilitate control over the native populace. However, Bhabha observes that mimicry is intrinsically fragmented by a deep ambivalence. As the mimic can never precisely replicate the colonizer, the performance invariably becomes a caricature that reveals the limitations and vulnerabilities of colonial authority. Mimicry generates a subversive threat; it risks destabilizing the very power it was intended to consolidate. Related to mimicry is Bhabha's concept of hybridity, which refutes the notion of pure, static cultures. Hybridity denotes a condition where disparate cultural systems interact, transform, and coalesce, resulting in a complex, fragmented identity. This transformation transpires within the "Third Space of Enunciation"—a liminal, contradictory domain where cultural signifiers and identities are continuously negotiated and reinterpreted. This paper employs Bhabha's concepts to assess Miri's role as a "mimic educator." It investigates how she manages her divided identity to transform the colonial classroom from a locus of epistemic violence—the systematic obliteration of indigenous knowledge systems—into a mechanism for subaltern empowerment and self-determination.

Michel Foucault: Space, Knowledge, and the Heterotopia

This study also integrates Michel Foucault's spatial theory, particularly his concept of the heterotopia, to analyze the novel's geographical and institutional context. In his 1967 lecture "Of Other Spaces," Foucault defines heterotopias as real, physical spaces that exist distinct from conventional sites. In contrast to utopias, which are idealized and imaginary, heterotopias are concrete locations present within every culture. They function as domains of alternative organization, simultaneously mirroring, challenging, inverting, and disrupting the ordinary spaces of a society. Heterotopias are frequently highly regulated, often necessitating specific permissions or rituals for entry, yet they afford a distinct form of liberation by suspending the behavioral norms that govern standard social life. By conceptualizing the remote borderlands of NEFA as a Foucaultian heterotopia, this analysis illustrates how the frontier functioned as a spatial sanctuary. It provided a context where Miri could evade the panoptic surveillance of urban Assamese patriarchy and the rigid strictures of British colonial centers, thereby establishing a unique environment for personal, professional, and political exploration.

Gender and Widowhood

To comprehend the transformative aspects of Indira Miri's trajectory in *Mereng*, it is necessary to examine the restrictive socio-cultural environment prevalent in early 20th-century Assam. Prior to the mid-1900s, the domestic sphere of Assamese society was meticulously governed by the codes of the upper-caste bhadralok (bourgeoisie). This indigenous patriarchal system maintained social order through absolute control over women's bodies, mobility, and intellectual engagement. Within this hierarchical structure, a woman's social status was entirely contingent on her relationship with a male figure—initially her father, then her husband. Consequently, a husband's death significantly diminished a woman's social standing. Bhadralok norms relegated widows to an "abject" condition. Widows were deprived of customary adornments, prohibited from participating in communal activities, subjected to severe dietary restrictions, compelled into perpetual mourning, and rendered socially marginalized and existentially disempowered. Her physical being was re-signified as a locus of impurity and misfortune, effectively dissociating her from the domain of living, autonomous individuals.

Anuradha Sarma Pujari meticulously details the imposition of these restrictive societal expectations upon the young Indira following her husband's premature death. Traditional Assamese society mandated her immediate and complete withdrawal into the silent, melancholic domesticity associated with widowhood. She was expected to enact the ritualized submission of the abject subject, confined within the domestic sphere indefinitely.

However, Miri's early experiences had already challenged these expectations. She exhibited a notable intellectual drive and a strong sense of individuality, attributes fostered under the ostensibly progressive but ultimately restrictive guidance of her father, Rai Bahadur Sonadhar Senapati. While her father valued education, his progressive inclinations remained within a patriarchal framework that perceived female accomplishment as an asset to be managed, rather than a means to complete autonomy.

Confronted with the prospect of enduring social marginalization, Miri opted to transcend the domestic enclosure, directly challenging the prescriptive norms of the bhadralok. Rather than internalizing the abject identity of the confined widow, she engaged in what Butler identifies as subversive performativity. Miri recognized that if her gendered identity was sustained through a stylized repetition of acts—such as wearing unadorned attire, maintaining a downcast gaze, and remaining secluded—she could disrupt this identity by enacting a distinct repertoire of behaviors.

Her initial act of subversion involved pursuing advanced education, necessitating her physical departure from the domestic sphere and entry into the public, predominantly masculine realm of academia. She relocated to Calcutta and subsequently travelled to Edinburgh for higher studies, actions that were highly unconventional for an Assamese widow of her era. Through the acquisition of knowledge and transnational mobility, she fundamentally reconfigured the "stylization" of her physical self. Her tangible presence in university lecture halls and public venues contradicted the societal expectation of the sequestered, unobserved widow.

A prominent manifestation of this subversive performativity is depicted in a recurring image within the novel: Indira Miri traversing the rugged landscapes of NEFA on horseback, attired in traditional Assamese clothing. This imagery functions as a powerful visual metaphor for her hybrid resistance. Rather than being perceived as a mere instrument of colonial mimicry through the adoption of Western dress, or capitulating to indigenous patriarchy by remaining confined to a palanquin in traditional attire, she constructs a significant counter-performance; combining her traditional dress with an assertive, mobile, and conventionally masculine action. Through this enactment, Miri's body transitions from a passive object of patriarchal scrutiny to an active, self-directed locus of political and social intervention. She leverages modern mobility to redefine her agency, demonstrating that the prescribed narrative of widowhood could be reconfigured through a deliberate and resolute performance of resistance.

NEFA as Heterotopia

The profound transformations realized by Indira Miri were geographically contextualized. The physical environment of her work --- the remote borderlands of the North East Frontier Agency (NEFA) was integral to her capacity for developing an autonomous identity. In *Mereng*, NEFA is portrayed as an administrative frontier situated at the outer limits of both British imperial influence and conventional indigenous social structures. It constituted a landscape of dense forests, unpredictable rivers, and varied tribal communities that resisted the precise cartographic delineations of the colonial state.

This study conceptualizes NEFA as a heterotopia. Foucault observed that while a society's regular spaces are extensively surveyed and codified to enforce discipline, a heterotopia operates as an "other" place where conventional norms are suspended or reversed. NEFA aligns with this characterization, representing

a concrete physical space that existed distinct from the social and cultural geography of the Assamese plains.

For Miri, the frontier served as a spatial sanctuary, remote from the pervasive scrutiny of institutionalized bhadralok domesticity. In urban centers of Assam, her actions, attire, and discourse would have been continuously monitored and assessed against stringent codes of caste, purity, and gendered confinement. In NEFA, these regulations were largely ineffectual. The stark conditions of wilderness survival rendered the rigid social structures of the plains irrelevant.

Within this heterotopic zone, Miri was neither entirely encompassed by British colonial civilizing initiatives nor constrained by local indigenous patriarchal frameworks. The frontier afforded her a distinct, liminal autonomy. Given the nascent and adaptable nature of the state's administrative infrastructure in this borderland, it was unable to implement the comprehensive surveillance characteristic of established colonial capitals.

This administrative flexibility enabled Miri to undertake a fluid, experimental articulation of identity. She was granted authority to establish an educational infrastructure from its foundations, a responsibility that necessitated her functioning as an administrator, a diplomat, a surveyor, and a leader—roles that would have been unavailable to her in Calcutta or Guwahati.

Moreover, the heterotopic character of the frontier facilitated the reconstruction of her internal self. The expansive and seemingly isolated landscape resonated with her internal sense of alienation as a widow. Rather than diminishing her resolve, the challenges posed by the terrain provided a constructive impetus. Each river traversed and each village incorporated into her educational network provided tangible validation of her competence.

The frontier not only tolerated her non-conformity but necessitated it. To persist and thrive in NEFA, Miri was required to relinquish the passive roles ascribed to traditional women. Consequently, the heterotopic space served as a critical environment for self-formation, enabling her to develop an autonomous subjectivity that would likely have been suppressed in the highly regulated urban centers of colonial Assam.

Hybridity and Mimicry

Assuming her role as the Chief Education Officer of NEFA, Indira Miri became directly involved with the administrative mechanisms of the colonial state. This placement positioned her within the core of imperial ideology. Her official

directive was not ideologically neutral; she was tasked with disseminating a Westernized, colonial pedagogy specifically intended to assimilate subaltern tribal communities into the state framework.

The colonial state regarded education as an instrument for pacification and assimilation, aiming to transform independent tribal populations into amenable, identifiable subjects amenable to governance. Consequently, Miri encountered the classic post-colonial predicament of "mimicry" as theorized by Homi K. Bhabha.

As a highly educated woman proficient in Western pedagogical methods, Miri was positioned to function as the archetypal "mimic educator." The colonial state anticipated her to leverage her dual identity to extend British civility into the frontier, implementing an educational system designed to fragment the consciousness of the tribal child by devaluing indigenous languages and traditions in favor of colonial knowledge. This process aligns with what Gayatri Spivak identifies as epistemic violence—the systematic suppression and marginalization of non-Western knowledge systems.

However, Pujari's narrative underscores Miri's strategic refusal to act as a passive agent of this epistemic violence. Instead of uncritically imposing an alien curriculum on the diverse communities of NEFA, Miri adapted her pedagogical methods locally. She recognized that effective education necessitates engagement rather than obliteration. Rather than perceiving tribal lifeworlds as tabula rasa or inherent deficits, she approached them with significant respect, dedicating efforts to learn their languages, comprehend their social structures, and incorporate their oral traditions into the educational framework.

Through these actions, Miri facilitates the emergence of what Bhabha terms the Third Space of Enunciation. This third space represents an ideological and cultural juncture that materializes when the binary oppositions of self/other and colonizer/colonized are destabilized. By establishing schools responsive to the specific realities and rhythms of the frontier, rather than the distant directives of the empire, Miri altered the function of the classroom. Under her leadership, it ceased to be a tool of imperial assimilation, transforming instead into a emancipatory environment where subaltern subjects could formulate a novel, hybrid identity that resisted both Western erasure and local subordination.

This transformation is predicated on the inherent ambivalence Bhabha identifies within colonial mimicry. The mimic subject is not merely a reflection; rather, it is a distorted mirror. When Miri assumed the role of a colonial administrator, her

performance evinced a distinction that revealed the constraints of colonial hegemony. She utilized the financial resources, authority, and infrastructure furnished by the British state, but reoriented these toward indigenous self-determination.

She personifies a "mimic educator" who operates as an agent of the state while concurrently redefining the parameters of her pedagogical mandate. Her interventions did not obliterate local cultures; instead, they reconfigured the colonial educational infrastructure into a mechanism for tribal empowerment. She illustrated that the instruments of the colonizer could be appropriated and recontextualized to foster critical consciousness among the most marginalized populations of the empire.

Structure and Identity Evolution

The psychological and existential framework of *Mereng* is supported by its tripartite structure. Anuradha Sarma Pujari organizes the novel into three distinct phases: Orunodoi (Morning), Modhyahna (Noon), and Godhuli (Evening). These divisions transcend mere temporal markers, representing discrete stages in Indira Miri's psychological, spiritual, and social development, charting her progression from a constrained daughter to an agent of change, and ultimately to a contemplative figure.

Orunodoi, named after the pioneering Assamese news magazine that marked a cultural renaissance, depicts the nascent stage of Indira's consciousness. This section delineates the formation of her early identity under her father's supervision and her subsequent entry into marriage. In this period, her selfhood is fragmented and largely contingent on patriarchal affirmation. The initial phase of her life is abruptly altered by her husband's sudden death, immersing her in the profound isolation of traditional widowhood. During this phase, she experiences the full burden of subaltern alienation. She functions as a passive subject, confined within the restrictive domesticity of the bhadralok, seeking to articulate her grief and her aspirations beyond social marginalization. Her identity in Orunodoi is characterized by deprivation, constraint, and the foundational, challenging accumulation of intellectual capacity. The novel transitions into its most active and extensive phase with Modhyahna. This section signifies the apex of Miri's agency and public authority, correlating with her relocation to the heterotopic frontier of NEFA. In this setting, the intellectual capabilities developed in her youth are fully deployed. Modhyahna portrays Miri as a formidable individual, navigating the challenging physical and political

landscape of the borderlands. She evolves from a grieving widow into an administrative leader, an equestrian, and an institution-builder. This phase is distinguished by her adept management of Bhabha's concepts of hybridity and mimicry. She addresses the daily demands of establishing schools, arbitrating inter-tribal conflicts, and engaging with both the departing British administrators and the nascent officials of independent India. Her identity in Modhyahna is characterized by fluidity, experimentation, and self-direction. She effectively integrates her cultural heritage as an Assamese woman with her identity as a Western-educated professional, transforming the frontier into a domain of personal and pedagogical accomplishment.

The concluding section, Godhuli, shifts to a period of introspection, legacy, and consolidation. As Miri approaches the later stages of her life, she disengages from the intense administrative activities to assess the influence of her life's work. This section chronicles her return from the frontier and her progression into old age, culminating in her recognition as a significant national figure. In Godhuli, the earlier fragmentations of her identity are resolved. She is no longer divided between public and private domains, nor is she constrained by the dual consciousness often associated with the post-colonial intellectual. Instead, she attains a state of integration, perceiving her life not as a sequence of discrete challenges, but as a continuous, intentional process of self-creation. Pujari utilizes this final section to present a significant critique of historical representations of pioneering women. Godhuli ensures that Miri's legacy is preserved not merely as a historical detail, but as an active model for the assertion of feminine autonomy.

Conclusion

Anuradha Sarma Pujari's *Mereng* functions as a complex post-colonial and feminist examination of how individual identity is constructed, deconstructed, and reconfigured within intersecting systems of structural oppression. Through a nuanced literary portrayal of Indira Miri's life, the novel transcends mere historical recounting, challenging the conventional classifications of traditional biography to reveal the operational dynamics of gendered and colonial power.

By applying Judith Butler's paradigm of performativity, this study has demonstrated how Miri transformed her physical presence into a locus of subversive performativity. She systematically rejected the abject narratives of silent, socially disenfranchised widowhood imposed by the bhadralok patriarchy, substituting them with a prominent, dynamic enactment of public authority.

Furthermore, by conceptualizing the remote borderlands of NEFA as a heterotopia, she illustrated how the physical periphery of the nation served as a crucial sanctuary. This frontier region enabled her to evade pervasive surveillance and cultivate a fluid, autonomous subjectivity that would have been suppressed within conventional urban environments.

Finally, through the framework of Homi K. Bhabha's theories, the study has illuminated Miri's intricate engagement with mimicry and hybridity. Positioned at the core of the colonial administrative structure, she effectively resisted perpetrating epistemic violence against indigenous communities. Instead, she localized her pedagogical approach, converting the classroom into a 'Third Space of Enunciation' where subaltern subjects could articulate their distinct hybrid identities and achieve authentic self-determination.

Mereng illustrates that even within the pervasive structures of colonial power and institutional patriarchy, the subaltern woman can assert agency. Indira Miri's trajectory indicates that identity is not a static construct but an ongoing, deliberate enactment of resistance. By utilizing a dynamic frontier as an environment for personal and pedagogical exploration, she reconfigured her position from a historically marginalized individual to an autonomous, hybrid, and self-determining subject.

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Chapter 58:Memes as Mirrors and Mediators: Negotiating Suppressed Identities and Social Belonging Among LGBT Adolescents in Culturally and Politically Restrictive Contexts

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Abstract

This chapter examines how LGBT adolescents use social media memes to negotiate suppressed identities and build social belonging in culturally and politically restrictive contexts. Focusing on Chinese social media platforms, including Weibo, BiliBili, Douyin, and WeChat, it asks how meme culture functions as an informal space for identity expression when open discussion is socially or politically foreclosed, and what this means for adolescent social belonging. Drawing on qualitative data from semi-structured interviews with ten Chinese adolescents aged 16 to 18, the chapter analyses meme images that participants shared from their own social media use as the empirical basis. Thematic analysis identified patterns in how participants described using memes in relation to identity, community, and safety. These findings are interpreted through everyday peacebuilding theory, digital counter-publics research, and adolescent social belonging studies. These frameworks together inform the chapter's central concept of Digital Contact Zones, understood as online spaces where dominant social norms and marginalised identities encounter one another through humour, irony, and symbolic language. Participants described meme sharing as both comforting and exciting, generating feelings of recognition and community that were otherwise unavailable to them. Alongside these affordances, however, they also reported tangible risks: account warnings, content removal, and fear of exposure by family or classmates. The chapter argues that these digital practices constitute a form of everyday peacebuilding and contribute to interdisciplinary conversations on identity, social belonging, and conflict in digital societies, with particular implications for youth mental health, digital governance, and peacebuilding scholarship.

Keywords: Digital Contact Zones; Everyday peacebuilding; LGBT youth identity; Social belonging; Social media memes

1. Introduction

Across Chinese social media platforms, a quiet but persistent practice has taken shape: LGBT adolescents expressing who they are not through explicit statements, but through jokes, symbols, shared references, and the layered visual shorthand of memes. The conditions that have made this practice necessary are well documented. Cultural expectations around gender and family, institutional silence on sexuality in schools, and platform-level censorship all converge to limit what can be said, by whom, and in what form (Zheng et al., 2023; Jiao, 2025). What is less well understood is how young people actually navigate these constraints at the level of everyday interaction.

The existing literature on LGBT life in China has tended to cluster around two poles: structural analyses of censorship and policy, and advocacy-oriented accounts of community visibility. Relatively little attention has been paid to the informal, mundane communicative practices, including the memes, coded phrases, and fandom rituals, that constitute much of daily digital life for LGBT youth on Weibo, Douyin, and WeChat (Cui, 2024; Zhang & Kang, 2024; He et al., 2025). This gap matters because these practices are not incidental. They are, we argue, where much of the actual work of identity negotiation and community formation takes place.

The chapter is organised around the claim that memes function as informal tools of negotiation, not simply reflecting suppressed identities but actively making them partly visible in contexts where open expression carries genuine risk (Ao, 2026; Zhu et al., 2025). Two research questions guide the analysis: first, how do memes help adolescents negotiate suppressed identities in culturally and politically restrictive settings? And second, what are the consequences of these negotiated practices for adolescents' sense of social belonging?

To address these questions, we develop the concept of Digital Contact Zones, understood as online spaces where marginalised identities and dominant social norms meet through culturally coded communication rather than direct confrontation (Aegerter & Söderström, 2025). Within these zones, identity negotiation is ongoing and partial; belonging is real but provisional (Caceros, 2024). The chapter contributes to interdisciplinary discussions on digital culture, identity, and youth development by closely attending to what young people actually do online and what those practices cost and enable.

2. Theoretical Framework: Negotiation as the Core Lens

Understanding how adolescents manage identity under conditions of social and political constraint requires a framework more nuanced than the binary of resistance versus compliance. In restrictive settings, identity-related action rarely takes the form of open defiance or complete silence; it unfolds instead through ongoing, context-sensitive processes of interpretation and adjustment. This chapter treats negotiation as its central analytical lens precisely because of this complexity.

The term "negotiation" is used here in a specific sense. It does not describe formal dialogue or deliberate compromise. Rather, it refers to the subtle, often improvised strategies through which people manage the tension between structural constraints and the impulse toward self-expression. These strategies are not always consciously planned; they emerge through repeated interaction, shaped by what participants perceive as safe, legible, and socially viable in a given context. In digital environments, this kind of negotiation frequently operates through cultural forms such as memes, humour, and symbolic language, which resist being pinned to fixed meanings, making them particularly useful under conditions of surveillance and restriction.

2.1 Everyday Peacebuilding and Informal Negotiation

The relevance of peacebuilding scholarship to this analysis may not be immediately obvious, but Lederach's (2005) work on everyday peacebuilding offers a productive framework for understanding how people sustain themselves within prolonged social tension. Lederach argues that peacebuilding is not reducible to institutional negotiation or formal conflict resolution; it encompasses the informal, often invisible practices through which ordinary people maintain relationships, manage contradiction, and gradually reshape the social conditions around them. For LGBT adolescents navigating a culture that does not openly acknowledge their identities, this framing is particularly apt. The tension they live within does not resolve into a discrete conflict event; it is an enduring feature of their social landscape, something to be managed over time rather than overcome at a single moment (Lederach, 2005; Mac Ginty, 2014).

Applying this perspective to digital environments reframes what might otherwise appear as trivial online behaviour. Sharing a meme, reposting a symbol, dropping a piece of coded language into a comment thread: none of these is a random act. They are small navigational moves, moments at which the gap between personal identity and publicly permissible expression is managed, if

only briefly and partially. Mac Ginty (2014) has emphasised that everyday peacebuilding frequently operates at precisely this level: through ordinary cultural practices that look insignificant from the outside but carry dense social meaning for those involved. Memes, with their reliance on shared cultural knowledge and their structural openness to multiple interpretations, are especially well adapted to this kind of work.

2.2 Digital Counter-Publics and Their Limits

Fraser's (2014) concept of counter-publics, understood as spaces of discursive retreat and regroupment for groups marginalised within mainstream public spheres, has become a standard reference in scholarship on minority digital communities. For LGBT youth in China, platforms such as Weibo and BiliBili do function as partial counter-publics: spaces where identity can be circulated indirectly through memes, fandom, and shared jokes, and where a degree of recognition becomes possible that is unavailable in mainstream or institutional settings (Boyd, 2010).

The emphasis on partiality is important. These platforms are not open, and the LGBT-related content they host persists largely because it remains indirect, folded into entertainment and fandom rather than legible as political speech. Participants in this study spoke repeatedly of "hiding in plain sight," meaning the practice of producing content whose meaning was available to those inside the community but invisible, or simply unremarkable, to those outside it. This is a significant departure from the counter-public model, which implies a relatively coherent oppositional discourse even if confined to protected spaces. What we observe instead is something more diffuse: communication structured around ambiguity and partial visibility, in which adolescents manage exposure rather than claiming it. The concept of Digital Contact Zones is proposed here partly to address this limitation, attending to the ongoing, context-specific quality of this negotiation rather than treating it as the gradual accumulation of counter-hegemonic discourse.

2.3 Adolescent Identity and the Need for Belonging

For LGBT adolescents in China, the developmental tasks of identity formation are compounded by an environment in which self-disclosure carries substantial social risk. Family expectations, school cultures, and broader social norms all exert pressure toward conformity, leaving many young people to manage the distance between who they understand themselves to be and what their social worlds can accommodate (Branje, 2022; Herrmann et al., 2024). The

psychological stakes of this management are significant: belonging, which Allen et al. (2022) describe as the fundamental human need to form and maintain meaningful interpersonal connections, becomes particularly fraught when identity itself cannot be openly declared.

During adolescence, sensitivity to peer judgement intensifies, and the desire for social recognition sharpens. Yet for LGBT youth in restrictive settings, the pathways to that recognition are narrow and uncertain. Some encounter social environments where their identities are actively stigmatised; others find pockets of support, but these are often precarious and contingent (Herrmann et al., 2024). The result is a kind of perpetual negotiation between the need for authentic self-expression, the desire for social acceptance, and the imperative of self-protection.

What is particularly relevant here is evidence from social psychology suggesting that belonging can develop without full disclosure. Partial and indirect forms of recognition, including shared language, emotional resonance, and subtle mutual acknowledgement, can generate genuine feelings of connection (Lüders et al., 2022). For adolescents whose identities cannot always be openly stated, this finding is more than theoretically interesting: it describes the actual texture of social life in restricted environments. The look that acknowledges a shared reference, the comment that signals understanding without naming it, the emoji placed with deliberate ambiguity: these small gestures do the relational work that explicit declarations cannot safely do (Pérez-Torres, 2024). Memes are, in this sense, a medium particularly well suited to the creation of belonging under constraint.

2.4 Digital Contact Zones

The concept of Digital Contact Zones is developed here to capture what existing frameworks only partially describe. It draws on Mary Louise Pratt's (2023) formulation of contact zones as social spaces where cultures meet, interact, and negotiate under asymmetrical conditions, but transposes this into the digital context, where the relevant asymmetry is not between colonial cultures but between dominant social norms and structurally marginalised identities.

Digital Contact Zones, as we define them, are online spaces where culturally coded practices make suppressed identities partially visible. Three features characterise these spaces. First, meaning is deliberately ambiguous: expressions are constructed to sustain multiple interpretations simultaneously, enabling users

to address different audiences with a single communicative act. Second, identity is conveyed indirectly through humour, irony, symbolism, and cultural references rather than through explicit declaration, which reduces the risk of exposure that directness would entail. Third, visibility is negotiated rather than given or withheld: it becomes available in certain moments and contexts, before certain audiences, while remaining limited in others.

This framework differs from the counter-public model in an important way. Counter-publics are defined partly by the aspiration to eventual public recognition; Digital Contact Zones make no such assumption. The negotiation they describe is ongoing and adaptive, as people continuously adjust how they present themselves in response to shifting platform conditions, audience compositions, and perceived risks. Memes are central to this dynamic because their formal qualities, including their reliance on indirection, their capacity to carry multiple simultaneous meanings, and their circulation through communities of shared cultural knowledge, make them exceptionally effective instruments of negotiated visibility.

3. Methodology

The empirical basis for this chapter is a set of semi-structured interviews with ten Chinese adolescents aged 16 to 18, all resident in China at the time of data collection. Interviews explored participants' experiences of social media use, their engagement with meme culture, and their understandings of identity and belonging in online contexts. The decision to use semi-structured interviews was guided by an interest in how participants themselves make sense of these practices, rather than in generating generalisable quantitative data about their prevalence or distribution.

One notable feature of the data collection process was that participants, without prompting, introduced visual materials, specifically meme images drawn from their own social media activity, into the interviews. These images became central to the analysis. Because the researchers did not solicit them, their emergence reflects something of participants' own sense of what was relevant to the topic at hand; the memes were not artefacts imposed by the research design but materials that participants themselves identified as meaningful (Braun & Clarke, 2006). This is consistent with participatory approaches in qualitative research, in which participant-generated materials enrich contextual understanding in ways that researcher-led instruments often cannot.

Analysis followed the thematic approach described by Braun and Clarke (2006), with attention to patterns in how participants characterised meme use in relation to identity expression, community formation, and risk management. Theoretical interpretation was guided by the three frameworks described above. It should be noted that the data were collected independently for this chapter and do not derive from either author's doctoral research; both authors contributed to the analysis and interpretation from their respective disciplinary backgrounds in psychology and peacebuilding studies.

4. Empirical Case: Negotiating LGBT Identities Through Memes

The following cases draw on practices found across the Chinese social media platforms represented in participants' interview accounts. Each case illustrates a distinct mode of identity negotiation, whether linguistic, affective, ironic, or symbolic, and together they demonstrate the range and sophistication of the communicative strategies through which adolescents manage identity and cultivate belonging in restricted digital environments.

4.1 Linguistic Reappropriation: "同志"

The term "同志" carries a long and layered history in Chinese public life. Originally a term of political address within Communist Party discourse, roughly equivalent to "comrade," it was reappropriated by Chinese LGBT communities during the 1990s and early 2000s to describe sexual minorities, a usage that spread from Hong Kong activist contexts into mainland digital culture. The reappropriation was neither accidental nor merely playful; it exploited the term's established political legibility to smuggle a new referent into circulation without making that referent directly nameable.

What makes "同志" particularly effective as a negotiating instrument is this persistent doubleness. In general-purpose contexts such as news reporting, official communications, and everyday speech, the term retains its conventional meaning without raising flags. Within LGBT communities and among those who recognise the alternate usage, it functions as a marker of shared identity. Adolescents can therefore deploy it in digital spaces where they cannot be certain who is watching, calibrating meaning to the audience without abandoning the expression entirely. The risk of direct self-identification is substantially reduced without severing the connection.

Figure 1



Note: Examples of the use of "同志" and related terms ("男同", "女同") in Chinese social media search and discussion spaces. Usernames and profile images have been anonymised by the authors.

Figure 1 illustrates the term's circulation across ordinary platform interactions, including search interfaces, comment threads, and discussion posts, rather than in dedicated or overtly political LGBT spaces. The pattern is telling: "同志" and its related forms ("男同," "女同") appear embedded in the texture of everyday digital conversation, which is precisely what makes them viable. Adolescents can participate in this economy of recognition without the symbolic exposure that more direct identity claims would entail.

4.2 Proxy Intimacy and Identity Exploration: "腐"

The figure of the "腐女" — "fujoshi," literally "rotten girl" — arrived in Chinese digital culture largely through Japanese popular media and the transnational circulation of boys' love (BL) content, but it has developed a distinctly Chinese character across platforms like BiliBili and Weibo. The term "腐" now describes not just a consumer category but a cultural sensibility and a set of community practices through which romantic and erotic interest in same-sex male relationships is expressed, performed, and shared. For the adolescents in this study, engagement with "腐" culture offered something more specific than entertainment: it provided a socially furnished space in which to explore questions of attraction and identity without attaching those explorations to a first-person declaration.

Participation takes many forms, including commenting on content, reposting, producing edits, and joining "CP" (couple pairing) discussions, all of which allow someone to engage deeply with same-sex intimacy while maintaining the interpretive shelter of fan identity. This is not deception; it is a structurally available ambiguity that participants use deliberately. The communities that form around "腐" culture are effectively dense: shared language, mutual recognition, and the pleasure of collective interpretation generate forms of belonging that do not require anyone to say explicitly who they are. As one participant put it, the community understood without asking.

4.3 Gender Affection and Emotional Projection: "姬" / "百合"

The terms "姬" and "百合" mark a related but distinct territory. Where "腐" culture centres on male same-sex relationships as objects of fan investment, frequently by women who may or may not identify as LGBT, "百合" ("lily" in Japanese, "yuri" in its gaming/anime register) describes female same-sex intimacy and, increasingly, a cultural space where young women can explore that intimacy for themselves rather than as spectators. The aesthetic vocabulary of "百合" in Chinese digital culture tends toward the emotional and the lyrical: emphasis falls on closeness, tenderness, and mutual understanding rather than on explicit sexuality, which makes participation available to a wider range of adolescents and less susceptible to platform moderation.

Several participants described being drawn to "百合" content not because they were already certain of their identities but because it offered a low-stakes environment in which to sit with questions they had not yet resolved. The framing of same-sex female affection as "pure" or "innocent," common in both

the content itself and in how fans discuss it, functions as a social buffer. It allows adolescents to explore feelings of attraction and intimacy without those feelings being immediately categorised, judged, or named. The community dimensions of this culture further support belonging: repeated participation in discussions, shared emotional reactions to content, and the production of responses and edits all create textured social relationships held together by common aesthetic commitments.

4.4 Irony, Ambiguity, and Negotiated Visibility: "社会主义兄弟情"

Of all the linguistic and symbolic strategies documented in this study, "社会主义兄弟情" or "socialist brotherhood," is perhaps the most openly ironic. The phrase has become a fixture of Chinese digital culture, used of describe emotionally intense or quasi-romantic relationships between male celebrities, fictional characters, or public figures, wrapped in the respectable vocabulary of revolutionary solidarity and male friendship. The irony is structural: the language of socialism and brotherhood is mobilised to gesture toward precisely the kind of same-sex intimacy that both political discourse and social convention cannot officially accommodate. The gap between what the phrase literally says and what users know it to mean is where the communication lives.

For adolescents navigating restrictive contexts, irony of this kind is not merely a rhetorical flourish; it is a practical solution to a communicative problem. By embedding LGBT-related meaning within politically sanctioned language, "社会主义兄弟情" allows discussion of same-sex desire to take place in open digital spaces without being directly named as such. The plausible deniability the phrase provides is understood and relied upon by all parties. Adolescents can express and receive recognition without the phrase ever requiring them to make an explicit identity claim.

Figure 2



Note: Examples of the phrase "社会主义兄弟情" and related ironic discussions in Chinese social media environments. Usernames and profile images have been anonymised by the authors.

Figure 2 shows the phrase appearing across entertainment and fandom threads, celebrity comment sections, and general discussion spaces, a distribution that reflects both the breadth of its circulation and its embeddedness in ordinary digital talk. What participants valued about it was precisely its portability: the phrase could travel through hostile or uncertain digital environments without accumulating the visibility that would make it a target, while still doing the relational work of community recognition for those who knew how to read it.

4.5 Affective Participation and Indirect Identity Expression: "磕CP"

The practice of "**磕**CP," which involves investing emotional energy in a romantic pairing, whether of real celebrities or fictional characters, is one of the most participatory forms of Chinese digital fandom. Its significance for LGBT adolescents lies not in the content of any particular pairing but in the relational infrastructure the practice builds. Through the shared labour of creating edits, discussing evidence for pairings, exchanging emotional reactions, and using a shared vocabulary of investment ("**磕到了**," "好甜"), participants develop dense, ongoing relationships with others whose sensibilities they have come to know through repeated interaction.

Same-sex pairings occupy an important position within this culture. Engaging with them allows adolescents to explore and express feelings of same-sex attraction and romantic interest within a frame that remains socially legible as entertainment rather than identity declaration. The community that forms around this engagement is not organised around explicit LGBT identity but around

shared taste, emotional investment, and the pleasures of collective interpretation. Belonging accrues through participation itself, through showing up, contributing, and being recognised as someone who understands what others are responding to, rather than through any discursive account of who one is.

Figure 3



Note: Examples of "磕CP" culture and related same-sex pairing discussions in Chinese social media environments. Usernames and profile images have been anonymised by the authors.

Figure 3 documents "磕CP" activity across fandom-oriented spaces, where the entertainment framing shapes both what participants can say and how they understand what they are doing. This framing is not false consciousness; participants are frequently aware of the relationship between their fan activities and their identities. But the fandom frame gives them room to explore, to connect, to be known without being required to arrive at fixed, declared conclusions about who they are.

4.6 Symbolic Visibility and Community Signalling: The 🌈 Emoji

The rainbow emoji occupies a deceptively simple position in this ecosystem of coded communication. It is, on the face of it, a minor piece of visual shorthand, a brightly coloured symbol that might appear in anyone's username, comment, or profile. But for LGBT adolescents using Chinese social media, its placement is rarely accidental. The 🌈 emoji has become a lightweight but effective tool of community signalling: a way of mark affiliation, express support, or quietly

indicate shared experience without producing text that can be straightforwardly read and acted upon by moderators or unfriendly observers.

Several participants described actively scanning for the emoji in others' profiles and comments as a way of orienting themselves within digital spaces, and of making small decisions about where it was safe or worthwhile to engage more openly. The symbol communicates primarily through association and visual convention rather than propositional content, which is precisely what makes it difficult to moderate and easy to deny. It is, in this respect, an emblem of the broader communicative strategy documented throughout this chapter: visibility achieved not through declaration but through the accumulation of small, deniable, mutually legible signals.

5. Analysis and Discussion

The six cases above do not simply document a range of communicative practices; taken together, they reveal something about the structure of digital life for LGBT adolescents in restrictive environments. Each case shows people working with the materials available to them, including existing language, established cultural genres, and widely circulated symbols, and repurposing those materials to make identity partly expressible without making it fully visible. The following sections draw out the theoretical implications of this pattern.

5.1 Memes as Low-Risk Identity Signalling Mechanisms

Perhaps the most consistent feature across all six cases is the preference for indirection. Participants almost never made explicit identity claims in the digital contexts they described. What they did instead was construct and circulate signals that were linguistic, visual, affective, and ironic, carrying meaning for those equipped to receive it while remaining innocuous to those who were not. This is the logic of selective legibility, and it operates with some sophistication: the same expression functions simultaneously as ordinary entertainment discourse and as community-specific identity communication, depending entirely on who is reading it.

The consequences of this for belonging deserve attention. Standard accounts of social recognition in adolescence tend to assume that meaningful belonging requires some form of mutual acknowledgement, in which people are seen for who they are rather than merely included in a group that does not know them. The accounts in this study suggest that this picture is more complicated in

restricted environments. Participants did not report feeling unrecognised or invisible within the communities that had formed around these practices; to the contrary, many described intense feelings of connection and validation arising precisely from the meme-mediated encounters in which shared understanding was demonstrated without being stated. Being seen through code, having someone understand your reference, laugh at your irony, or place the same emoji, carried its own form of recognition, one that was felt as meaningful even when it was never made explicit.

This finding has implications for how we theorise belonging in digital spaces more broadly. It suggests that the relationship between disclosure and recognition is not as straightforward as it is sometimes assumed, and that forms of connection built on shared cultural knowledge and indirect mutual understanding may be more robust than their partial and provisional character would imply.

5.2 Structural Constraints as a Shaping Force

The practices documented here did not emerge in a vacuum. Their specific character, including a preference for irony over sincerity, for fandom framing over political framing, and for visual symbols over verbal declarations, reflects the particular configuration of constraints within which they developed. Platform governance, cultural norms around sexuality and gender, and the social risks of family or peer exposure all shape not merely whether identity can be expressed but the forms expression takes. To treat the meme practices in this chapter as free choices made by autonomous individuals would be to misread them significantly; they are adaptive responses to a structured environment, and their form is intelligible only against that background.

This is what Lederach (2005) sought with the concept of moral imagination: the capacity to find creative pathways through constraints rather than simply accepting the terms imposed by limiting structures. The adolescents in this study are not simply evading restrictions; they are actively developing communicative repertoires suited to their environment, anticipating what is safe and what is not, adjusting as conditions change. Mac Ginty's (2014) emphasis on the adaptive and improvisational quality of everyday peacebuilding is relevant here: these young people are doing the ongoing, practical work of living within conditions that are not of their choosing, finding ways to maintain connection and community that do not require the conditions to change first.

The structural shaping of expression also affects how identity is experienced. When self-articulation depends persistently on ambiguity and indirection, identity cannot be held or communicated as a stable, coherent whole. It becomes fragmented across contexts and audiences, available in some spaces and withheld in others, and is constantly calibrated to the specific risk profile of each interaction. This is not a failure of agency; it is what agency looks like within these constraints. But it does mean that the experience of identity for these adolescents is characterised by a degree of contingency and incompleteness that has its own psychological and social weight.

5.3 Negotiated Social Belonging in Digital Contact Zones

What emerges from the interaction between these signalling practices and their structural conditions is a particular configuration of social belonging that is neither securely achieved nor simply absent, but persistently negotiated through the accumulation of small, coded interactions. We have described this configuration as belonging in Digital Contact Zones, and it has several features worth unpacking.

Most notably, it does not require or depend on full identity disclosure. The communities that have formed around "腐" culture, "磕CP" practices, and "百合" aesthetics are held together not by shared identity declarations but by shared cultural investments, shared emotional responses, and shared communicative codes. Participants know each other through how they engage with content and language rather than through what they say about themselves. This is a different kind of community from that organised around explicit identity, but the data suggest it is no less real or meaningful to those who inhabit it.

From a peacebuilding perspective, this matters. Lederach's (2005) insight that everyday peacebuilding creates connection in the midst of difficult conditions rather than waiting for those conditions to resolve first is well illustrated here. The belonging that adolescents in this study describe does not require the social or political conditions around them to improve; it is generated within and despite those conditions, through the persistent exercise of creative community-making. Richmond's (2011) concept of everyday peace similarly points toward the informal, relational work through which people sustain themselves and one another in environments that do not fully accommodate them. Digital Contact Zones are a contemporary instance of this kind of work, and one that may be becoming increasingly central to adolescent social life as more of that life moves into digital spaces.

5.4 The Double-Edged Nature of Digital Negotiation

Any account of these practices that treated them only as resourceful adaptations would be incomplete. Participants were clear that the digital environments they described are also environments of genuine risk, and that the strategies they use are not fully protective. Several described posts disappearing, accounts receiving warnings, and the constant low-level anxiety of not knowing who might be seeing what they posted. Others described the specific dread of family members or classmates encountering their content, a form of exposure that platform moderation could not prevent and that carried social consequences extending well beyond the digital context.

These risks change the texture of belonging in Digital Contact Zones in important ways. Community membership must be held carefully, continually adjusting to shifting assessments of the audience and context. Expressions of identity that feel safe one day may feel exposed the next as platform policies change or the social composition of a given space shift. The belonging that results is meaningful, and several participants described it as the only belonging of this kind available to them, but it is also inherently unstable, built on forms of communication that depend on continued ambiguity and are vulnerable to the very conditions that make them necessary. Digital Contact Zones, in this respect, are both enabling and limiting; they make something possible that would otherwise be foreclosed, but the terms on which they make it possible reproduce some of the constraints they partially overcome.

5.5 Extending the Conceptual Contribution

The concept of Digital Contact Zones, as developed through these cases, is intended to contribute to broader scholarship on digital culture, identity, and social belonging in two related ways. First, it directs attention to negotiated visibility as a structurally significant feature of digital interaction in restrictive environments, understood not as a failure of full visibility or a step toward it, but as a distinct mode of being present in digital spaces that has its own logic, costs, and affordances. The adolescents documented here are not struggling toward open expression and falling short; they are operating competently within a different communicative regime, one organised around calibrated ambiguity rather than disclosure.

Second, the concept suggests that belonging in these spaces is better understood as a process than as a state, something continuously produced through interaction rather than achieved and maintained. This has implications for how

researchers and practitioners think about LGBT adolescent wellbeing in restrictive contexts. If belonging develops through the accumulation of small, coded interactions rather than through formal inclusion or explicit recognition, then approaches focused solely on expanding visible representation or institutional acknowledgement may miss much of where the actual work of community formation is happening. Digital Contact Zones are not a substitute for structural change, but they are real, and they matter to the young people who inhabit them.

6. Conclusion

This chapter has examined how LGBT adolescents in China use meme culture and digital communication to navigate identity and belonging in environments where open expression is socially and politically foreclosed. What the analysis reveals is not a story of simple restriction and workaround, but something more textured: a set of sophisticated communicative practices through which young people make identity partly visible without fully exposing it and build genuine community without requiring anyone to declare who they are.

The concept of Digital Contact Zones has been developed here to name and describe this configuration. These are not spaces characterised by openness or safety in any straightforward sense; they are spaces of persistent negotiation, where the terms of visibility and belonging are continuously being worked out against a background of structural constraint. What they offer is not freedom from risk but practical room to manoeuvre within it, creating opportunities for recognition, connection, and identity exploration that would not otherwise be available.

Memes on this account are not simply cultural objects or entertainment artefacts. They are instruments of negotiated visibility: flexible, portable, and deniable enough to travel through hostile or uncertain digital environments while still carrying the identity-related meanings that make community possible. The adolescents in this study are not passive consumers of meme content; they are active producers and interpreters of a communicative system adapted to the specific conditions of their social lives. Attending to the sophistication of that system, including its layered meanings, its community logics, and its management of risk, is essential to understanding what digital life actually involves for young people in restricted environments.

The peacebuilding framework applied in this analysis highlights an important aspect of the temporal and relational character of this work. Identity negotiation for these adolescents is not an event but an ongoing condition; it must be sustained, adjusted, and renewed through the continued exercise of the practices documented here. The belonging that results is similarly provisional and relational, dependent on the continued circulation of shared cultural forms and the continued presence of others who know how to read them. This fragility does not diminish its value. For many of the young people in this study, it represented the most significant experience of social recognition they had.

The implications of these findings extend across several fields. In youth mental health research and practice, they highlight the importance of understanding the digital social worlds young people inhabit, not as risk environments to be managed but as spaces where real and significant relational work is occurring. For digital governance and platform policy, they raise uncomfortable questions about what is lost when indirect, ambiguous, or community-specific communication is swept up in broad content moderation strategies. And for peacebuilding scholarship, they suggest the value of attending to the micro-level, everyday practices through which people manage social conflict, not only in post-conflict societies but also in the ordinary conditions of constrained social life. Future research would do well to examine how these Digital Contact Zone practices vary across different restrictive contexts, and how their conditions of possibility are shaped by the specific technical and social architectures of the platforms on which they occur.

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Chapter 59:Beyond Punishment: The Role of Counselling and Parental Engagement in Student Discipline in Sri Lankan Secondary Schools

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Abstract

Maintaining student discipline and ensuring compliance with school rules and regulations remain significant challenges in contemporary education systems. These challenges highlight the need to move beyond traditional punitive disciplinary practices toward more constructive and sustainable behavioural interventions. This study examined the effectiveness of non-punitive disciplinary strategies, particularly school-based counselling and parental engagement, in promoting positive student behaviour in secondary schools in Sri Lanka. A descriptive mixed-methods research design was employed. Using stratified random sampling, five Sinhala-medium secondary schools representing 1AB and 1C categories were selected from the Kelaniya and Gampaha education zones. The study involved 245 stakeholders, including principals, teachers in charge of student discipline, counselling teachers, teachers, parents, and students. Data were collected through questionnaires, interviews, observations, and document analysis, and were analysed using descriptive statistics and thematic analysis. The findings indicated that counselling and parental engagement were widely recognized as important strategies for promoting positive behavioural change. However, a clear gap was identified between policy expectations and actual school practices. Although official educational policies discourage punitive disciplinary measures, certain punishment-based practices continued to be implemented at the school level, revealing a policy–practice discrepancy. Furthermore, notable differences emerged between teacher-reported disciplinary practices and student experiences. More than 70% of students expressed a preference for counselling-based interventions over punitive approaches. The study concludes that counselling and active parental engagement play a vital role in fostering sustainable student discipline. It recommends strengthening

institutional counselling services, promoting consistent implementation of non-punitive disciplinary practices, and enhancing structured school–home collaboration.

Keywords: *Student discipline; School counselling; Parental engagement; Policy–practice gap; Non-punitive strategies; Sri Lankan secondary education*

1. Introduction

Educational institutions serve not only as centres of academic learning but also as social organizations responsible for shaping morally responsible, emotionally competent, and socially disciplined citizens. Within this broader educational mission, student discipline remains one of the most essential prerequisites for effective teaching, meaningful learning, and institutional development. A disciplined school environment contributes significantly to academic achievement, emotional wellbeing, teacher satisfaction, classroom stability, and the development of a positive school culture.

In recent decades, student behavioural management has emerged as an increasingly complex challenge across global educational systems. Studies conducted across Asia, Africa, Europe, and Oceania have consistently reported rising concerns related to classroom disruption, absenteeism, emotional dysregulation, peer aggression, digital distraction, and declining behavioural accountability among adolescents. Post-pandemic educational studies further indicate that prolonged social isolation, technology dependence, emotional stress, and weakened peer interaction have intensified behavioural challenges in school settings.

Within the educational context of Sri Lanka, student discipline is regulated through multiple policy frameworks issued by the Ministry of Education. These include school management guidelines, child protection frameworks, and disciplinary circulars designed to safeguard student rights while maintaining institutional order. Particularly significant is Ministry Circular No. 12/2016, which explicitly prohibits physical punishment and promotes child-friendly disciplinary management approaches. Similar policy directives emphasize counselling, parental collaboration, behavioural monitoring, student participation, and preventive interventions in maintaining school discipline.

Despite these policy directives, school administrators continue to encounter substantial disciplinary challenges. Preliminary findings from the present study identified classroom noise, disruption of teaching and learning activities, late

attendance, unauthorized absence, misuse of mobile phones, peer conflicts, inappropriate interpersonal relationships, and substance-related behaviours as recurring disciplinary concerns within secondary schools. Documentary evidence further revealed that substance-related incidents, although less frequent, were perceived as among the most serious disciplinary threats facing schools.

Historically, school disciplinary practices in many educational contexts relied heavily on punitive interventions such as corporal punishment, public humiliation, suspension, classroom exclusion, and verbal intimidation. Although such strategies may temporarily suppress undesirable behaviour, contemporary educational psychology increasingly questions their long-term effectiveness. Research suggests that punitive approaches often generate fear, resentment, emotional withdrawal, reduced school connectedness, and behavioural resistance rather than genuine behavioural transformation.

Consequently, modern educational systems increasingly emphasize restorative and supportive disciplinary approaches. Among these, school-based counselling and parental engagement have emerged as effective strategies for improving student conduct and promoting long-term discipline. Counselling enables students to understand the underlying causes of behavioural challenges, develop emotional regulation skills, strengthen self-awareness, and improve behavioural accountability. Similarly, parental engagement extends behavioural expectations beyond the school environment by creating consistency between home and school expectations.

Against this background, the present study sought to examine the role of counselling and parental engagement as non-punitive disciplinary strategies within secondary schools in Sri Lanka. By integrating both quantitative patterns and qualitative stakeholder experiences, the study contributes to the growing body of knowledge on positive discipline, policy implementation, and school behavioural management.

1.1 Problem Statement

Maintaining student discipline has become one of the most significant challenges confronting contemporary school administrations. Although schools formally implement rules and regulations designed to promote positive behaviour, behavioural non-compliance continues to affect teaching, learning, classroom management, and school climate. Furthermore, despite policy directives

promoting child-friendly disciplinary practices, evidence suggests that punitive disciplinary approaches continue to be employed in certain educational contexts.

Within the Sri Lankan educational system, limited empirical research has examined how supportive disciplinary strategies, particularly counselling and parental engagement, contribute to sustainable behavioural change among secondary school students. Most existing studies focus primarily on disciplinary problems rather than evaluating intervention effectiveness. Moreover, little is known about the extent to which formal policy directives are translated into actual school practice. The present study addresses this research gap by examining whether counselling and parental engagement function as effective alternatives to punitive disciplinary approaches while identifying possible policy–practice gaps in disciplinary implementation.

1.2 Research Objectives

The present study was guided by five objectives:

- To identify the most common disciplinary issues encountered in secondary schools.
- To examine the role of counselling in correcting student behavioural misconduct.
- To investigate parental engagement in school disciplinary management.
- To analyse stakeholder perceptions regarding disciplinary interventions.
- To identify policy–practice gaps in disciplinary implementation.

1.3 Significance of the Study

The study contributes to the growing body of empirical research on positive discipline within South Asian educational contexts. It provides evidence regarding the effectiveness of counselling and parental engagement as alternatives to punitive disciplinary practices while evaluating the implementation of national disciplinary policies. The findings hold practical relevance for school administrators, policymakers, teacher educators, counsellors, parents, and researchers seeking to strengthen positive behavioural management in secondary education.

2. Literature Review

2.1 Theoretical Foundation

The present study is grounded in the theoretical perspectives of Albert Bandura and Barry Zimmerman. Bandura's Social Learning Theory proposes that human behaviour is acquired through observation, imitation, modelling, and reinforcement. Within school environments, students continuously observe the behaviours, emotional responses, and disciplinary practices demonstrated by teachers, peers, and institutional authority figures. Through repeated observation and reinforcement, students internalize behavioural norms that shape their future conduct. This theoretical perspective suggests that punitive disciplinary behaviour demonstrated by teachers may unintentionally model aggression, fear, and coercive authority, whereas counselling-oriented approaches model empathy, dialogue, and constructive behavioural regulation.

Similarly, Zimmerman's Self-Regulated Learning Theory emphasizes individuals' capacity to monitor, evaluate, and regulate their own behaviour in response to internal goals and external expectations. According to this framework, behavioural transformation occurs when students develop self-awareness, emotional regulation, goal-setting abilities, and self-monitoring capacities. Counselling interventions directly support these processes by encouraging reflective thinking, emotional expression, behavioural analysis, and personal accountability. Together, these theoretical frameworks provide a strong conceptual foundation for understanding how counselling and parental engagement contribute to sustainable behavioural transformation within educational settings.

2.2 Global Perspectives on School Discipline

School discipline has received considerable scholarly attention across international educational contexts. Research conducted in Kenya, Ethiopia, Australia, and the United Kingdom has consistently reported that behavioural management remains one of the most significant challenges facing contemporary school administrators. Studies indicate that students who clearly understand institutional rules and experience consistent behavioural expectations demonstrate stronger school attachment, improved classroom participation, and reduced behavioural misconduct. Post-pandemic educational research has further identified increased emotional instability, peer conflicts, digital distraction, and declining classroom engagement among adolescents, highlighting the importance of supportive and psychologically informed disciplinary approaches rather than traditional punitive strategies.

2.3 School Counselling and Behavioural Transformation

School counselling has emerged as one of the most influential supportive interventions in contemporary educational psychology. Unlike punitive disciplinary approaches that focus primarily on suppressing undesirable behaviour, counselling seeks to identify emotional, social, familial, and psychological factors underlying behavioural misconduct. By addressing root causes rather than symptoms, counselling promotes sustainable behavioural transformation. International research consistently demonstrates that counselling contributes significantly to students' emotional regulation, self-awareness, conflict resolution abilities, academic engagement, and social competence. By helping students express emotional concerns and reflect on behavioural triggers, counselling strengthens self-awareness, accountability, and emotional resilience. Within the Sri Lankan educational context, counselling has increasingly been recognized as an important behavioural management strategy. National child protection policies and school management frameworks encourage schools to establish counselling services as preventive mechanisms for behavioural management, emotional support, and student welfare. These functions align closely with Zimmerman's self-regulated learning framework, which emphasizes self-monitoring and behavioural control. Consequently, counselling may be viewed not merely as a corrective mechanism but as an educational process that strengthens students' personal agency and emotional competence.

2.4 Parental Engagement and Behavioural Accountability

Parental engagement has been widely recognized as a critical component of student behavioural development. Family environments significantly shape children's attitudes toward authority, responsibility, emotional regulation, and social norms. When schools actively involve parents in disciplinary processes, behavioural expectations become more consistent across home and school environments. International studies indicate that students whose parents actively participate in school-related behavioural interventions demonstrate lower rates of absenteeism, fewer disciplinary referrals, and stronger academic engagement.

Within the Sri Lankan educational context, parental involvement has traditionally been recognized as an important component of school administration. Parents are frequently invited to discuss behavioural concerns, academic progress, and emotional development. However, variations in parental awareness, socioeconomic conditions, occupational commitments, and communication patterns often influence the effectiveness of such collaboration. The present study therefore views parental engagement as an important

reinforcement mechanism that extends school disciplinary expectations into home environments.

Recent international research further emphasizes that collaborative parental engagement contributes significantly to the effectiveness of restorative and non-punitive disciplinary approaches. UNESCO (2023) highlighted that emotional support, counselling, and strong parent–school partnerships improve students' social-emotional competencies and reduce behavioural misconduct. Similarly, Epstein (2021) emphasized that meaningful parental participation strengthens behavioural accountability, school connectedness, and academic engagement among adolescents. McCluskey et al. (2023) further argued that restorative disciplinary practices become more effective when schools establish collaborative relationships with families and communities, thereby promoting inclusion, accountability, and sustainable behavioural transformation.

2.5 Policy Context of School Discipline in Sri Lanka

School disciplinary management in Sri Lanka operates within a policy framework designed to balance behavioural accountability with child protection and educational inclusion. Ministry guidelines emphasize student welfare, psychological safety, positive discipline, and institutional accountability. Of particular relevance is Ministry Circular No. 12/2016, which prohibits physical punishment and encourages schools to adopt child-friendly disciplinary approaches. Additional policy documents address student protection, mobile phone usage, school management, behavioural monitoring, and counselling services. These policy frameworks collectively reflect a national commitment toward positive disciplinary management. However, the extent to which these policies are consistently implemented across schools remains an important empirical question. The present study therefore not only examines disciplinary practices but also evaluates the alignment between formal policy directives and actual school-based implementation.

3. Methodology

3.1 Research Paradigm

The present study was conducted within a pragmatic research paradigm. Pragmatism emphasizes the integration of multiple methodological approaches in addressing complex social phenomena. Student discipline represents a multidimensional educational issue involving behavioural, emotional,

institutional, social, and policy-related dimensions. Accordingly, a mixed-methods approach was considered most appropriate for obtaining a comprehensive understanding of disciplinary practices and stakeholder experiences.

3.2 Research Design

A descriptive mixed-methods research design was adopted by integrating quantitative and qualitative approaches. The quantitative component enabled the identification of measurable behavioural patterns, frequencies, and stakeholder perceptions, while the qualitative component provided deeper insights into stakeholder experiences, institutional challenges, and contextual realities. The integration of both approaches strengthened triangulation and improved the validity of findings.

3.3 Population of the Study

The population consisted of Sinhala-medium secondary schools categorized as 1AB and 1C within selected educational zones in Western Province, Sri Lanka. The stakeholder population included principals, teachers in charge of student discipline, counselling teachers, teachers, parents, and students.

3.4 Sampling Procedure

Stratified random sampling was employed to ensure representation across school categories and stakeholder groups. Five secondary schools were selected from the Kelaniya and Gampaha educational zones. The final sample comprised 245 participants.

Table 1: Distribution of Participants (N = 245)

Stakeholder Group	n	%
Principals	5	2.04
Teachers in charge of student discipline	10	4.08
Counselling Teachers	10	4.08
Teachers	95	38.78

Stakeholder Group	n	%
Parents	25	10.20
Students	100	40.82
Total	**245**	**100.00**

Note. Percentages are based on the total sample.

The sample demonstrates broad stakeholder representation. The inclusion of both adult stakeholders and students strengthened the validity of behavioural comparisons and enabled triangulated interpretation.

3.5 Data Collection Instruments

Data were collected using structured questionnaires, semi-structured interviews, direct observations, and document analysis. The research instruments were developed based on the objectives of the study and an extensive review of literature related to student discipline, counselling, parental engagement, and behavioural management. Separate structured questionnaires were designed for teachers in charge of student discipline, counselling teachers, teachers, parents, and students in order to obtain quantitative data regarding awareness of school rules, disciplinary practices, perceptions of counselling, parental involvement, and behavioural experiences. The instruments were reviewed by experts in educational administration and educational psychology to ensure content validity and contextual relevance. A pilot study was conducted in a school outside the selected sample to assess clarity, reliability, and applicability of the instruments, and necessary modifications were made prior to final data collection. Since the study was conducted in Sinhala-medium secondary schools, particular attention was given to linguistic clarity and contextual appropriateness during instrument preparation.

Semi-structured interviews were conducted with principals to obtain administrative perspectives regarding disciplinary challenges, intervention strategies, policy implementation, and institutional constraints. Direct observations focused on classroom interactions, student behaviour, disciplinary procedures, and school climate. Documentary analysis included disciplinary records, school regulations, incident reports, and counselling documentation. The use of multiple data collection methods strengthened methodological triangulation and enhanced the reliability and credibility of the findings.

3.6 Validity and Reliability

Content validity was established through expert review by specialists in educational administration and research methodology. Pilot testing was conducted prior to data collection to ensure clarity, relevance, and consistency. The mixed-methods design further enhanced reliability through methodological triangulation.

3.7 Ethical Considerations

Ethical considerations were carefully maintained throughout the study. Prior permission to conduct the research was obtained from the relevant educational authorities and school administrations before data collection commenced. All participants were informed about the purpose, nature, and objectives of the study, and voluntary participation was ensured throughout the research process. Confidentiality and anonymity were strictly maintained by avoiding the disclosure of participants' personal identities and institutional information in all stages of data collection, analysis, and reporting. Informed consent was obtained from adult participants, while appropriate permission procedures and ethical safeguards were followed when collecting data from student participants in accordance with child protection principles. Participants were also informed of their right to withdraw from the study at any stage without any negative consequences. The study adhered to accepted ethical standards and professional guidelines governing educational research.

4. Quantitative Findings

4.1 Awareness of School Rules and Regulations

The first objective examined stakeholder awareness regarding school rules and regulations. Findings indicated high awareness levels among all professional stakeholders. Principals, teachers in charge of student discipline, and counselling teachers reported complete awareness of institutional disciplinary regulations. Teacher awareness exceeded ninety percent, while student awareness reached approximately eighty-nine percent. Parental awareness, although relatively high, was comparatively lower than that of school personnel.

Table 2: Stakeholder Awareness of School Rules

Stakeholder Group	Awareness (%)
Principals	100
Teachers in charge of student discipline	100
Counselling Teachers	100
Teachers	94
Students	89
Parents	84

Note. Higher percentages indicate stronger awareness of institutional rules.

The findings suggest that behavioural non-compliance cannot be explained solely by lack of awareness. Rather, behavioural internalization, emotional regulation, and implementation consistency appear to play more influential roles.

4.2 Availability of Written School Rules

Stakeholders were asked whether school rules existed in written form. Most professional stakeholders confirmed the existence of written disciplinary policies. However, lower recognition among parents and students suggests incomplete dissemination of formal behavioural expectations.

Table 3: Availability of Written School Rules

Stakeholder Group	Yes (%)
Teachers in charge of student discipline	100
Counselling Teachers	100
Teachers	89
Students	71
Parents	64

Note. Lower recognition among parents and students indicates communication limitations.

These findings indicate that written disciplinary frameworks are institutionally present but not equally accessible to all stakeholder groups.

4.3 Major Student Disciplinary Issues

Document analysis identified the most frequent behavioural violations observed within the sampled schools.

Table 4: Major Student Disciplinary Issues

Behaviour	Frequency (%)
Classroom disruption	84
Late attendance	79
Unauthorized absence	66
Mobile phone misuse	61
Peer conflicts	58
Romantic relationships	47
Substance-related behaviour	21

Note. Frequencies are based on triangulated documentary evidence.

Classroom disruption recorded the highest frequency, indicating that routine classroom behavioural management remains a major administrative concern. Although substance-related incidents were numerically lower, documentary analysis identified these as among the most serious disciplinary threats.

4.4 Counselling-Based Behavioural Interventions

One of the central objectives of this study was to examine the extent to which counselling is used as a corrective intervention in managing student disciplinary issues. Questionnaire responses obtained from teachers in charge of student discipline revealed that counselling is widely recognized as the primary intervention for behavioural correction.

Table 5: Use of Counselling as a Disciplinary Intervention

Response Category	Frequency	%
Always	10	100
Often	0	0

Response Category	Frequency	%
Sometimes	0	0
Rarely	0	0
Never	0	0

Note. Nearly all teachers in charge of student discipline reported regular use of counselling interventions.

These findings indicate that counselling has moved beyond being an occasional intervention and has become an institutionalized behavioural management strategy within the sampled schools.

a. Mean Score Analysis of Stakeholder Perceptions

Mean score analysis was conducted to examine stakeholder perceptions regarding counselling effectiveness, parental engagement, and punitive disciplinary approaches. The findings indicated that counselling-based interventions received the highest level of agreement among stakeholders (M = 4.21), while punitive disciplinary approaches received comparatively lower acceptance levels (M = 2.11). These findings suggest increasing institutional preference toward supportive and non-punitive behavioural management strategies.

Table 6: Mean Score Analysis of Stakeholder Perceptions

Variable	Mean	Interpretation
Counselling effectiveness	4.21	High
Parental involvement	3.88	Moderate–High
Punitive discipline acceptance	2.11	Low

4.6 Cross-Tabulation Analysis

Cross-tabulation analysis was conducted to examine relationships between stakeholder perceptions and institutional contexts. The findings revealed that students from 1AB schools demonstrated slightly higher preference for

counselling-based interventions compared to students from 1C schools. Similarly, schools reporting stronger parental communication practices demonstrated lower levels of repeated behavioural misconduct. These findings suggest that school context and parent–school collaboration may influence behavioural outcomes and perceptions regarding disciplinary approaches.

Table 7: Cross-Tabulation Analysis

School Category	Preference for Counselling (%)	Preference for Punishment (%)
1AB	78	2
1C	66	5

a. Chi-Square Analysis

A Chi-square analysis was conducted to examine the relationship between students' preference for counselling interventions and school category. The findings indicated a statistically significant association between school category and disciplinary preference ($\chi^2 = 8.42$, df = 1, $p < .05$). This suggests that institutional context may influence students' perceptions regarding disciplinary approaches.

4.8 Parental Engagement in Behavioural Management

Teachers were asked to indicate the extent to which parents are involved when behavioural concerns arise. The findings revealed that parental communication constitutes an important component of school disciplinary management.

Table 8: Parental Engagement Practices

Practice	Always (%)	Often (%)
Informing parents	90	10

Practice	Always (%)	Often (%)
Parent meetings	74	26
Follow-up communication	68	32

Note. Parent communication demonstrates consistently high institutional adoption.

These findings indicate that schools increasingly recognize parents as behavioural partners rather than external observers.

4.9 Cross-Stakeholder Perception Analysis

One of the most significant findings of the study emerged from comparisons between teacher-reported disciplinary practices and student-reported behavioural experiences. Teachers overwhelmingly reported the use of counselling, guidance, and parental communication as primary disciplinary strategies. However, student responses revealed continued exposure to punitive practices.

Table 9: Teacher–Student Comparison of Disciplinary Practices

Practice	Teachers (%)	Students (%)
Counselling	100	72
Warning	95	61
Parent communication	90	54
Classroom exclusion	12	80
Verbal humiliation	0	54
Physical punishment	0	48

Note. Student responses indicate continued exposure to punitive disciplinary experiences.

These differences indicate substantial perception gaps between official disciplinary narratives and students' lived experiences, raising important questions regarding accountability, transparency, and policy implementation.

4.10 Policy–Practice Gap Analysis

One of the most significant findings relates to the gap between formal disciplinary policy and actual school-based implementation.

Table 10: Policy–Practice Gap Analysis

Dimension	Policy Position	Field Evidence
Physical punishment	Prohibited	Occasionally practiced
Verbal humiliation	Discouraged	Reported by students
Counselling	Recommended	Widely practiced
Parent engagement	Recommended	Regularly practiced
Behavioural monitoring	Required	Inconsistent

Note. Field evidence is based on triangulated questionnaire, interview, observation, and document analysis.

These findings indicate that while schools formally endorse positive disciplinary policies, implementation remains uneven across institutional contexts.

5. Qualitative Findings

Qualitative data obtained through semi-structured interviews, direct observations, and document analysis were examined using thematic analysis. Through repeated reading, coding, categorization, and thematic synthesis, four major themes emerged.

5.1 Counselling Promotes Sustainable Behavioural Transformation

Across interviews, participants consistently emphasized that counselling produces long-term behavioural improvement among students who repeatedly violate school rules and regulations. Principals explained that students who

initially demonstrate behavioural resistance often show gradual improvement following structured counselling interventions combined with continuous monitoring and personal guidance. Counselling teachers similarly reported that behavioural change becomes more sustainable when students are provided with opportunities to openly discuss emotional challenges, family-related stress, academic difficulties, peer conflicts, and personal insecurities.

Observational evidence further supported these perspectives by demonstrating that students who had undergone counselling interventions displayed improved classroom participation, reduced behavioural disruption, and stronger interpersonal relationships with both peers and teachers. These findings suggest that counselling facilitates emotional expression, behavioural reflection, self-awareness, accountability, and constructive problem-solving. Rather than functioning merely as a corrective mechanism, counselling appears to operate as a developmental educational intervention capable of strengthening students' emotional resilience and behavioural self-regulation.

5.2 Parent–School Collaboration Strengthens Behavioural Accountability

Interview participants repeatedly emphasized the importance of parental cooperation in achieving sustainable behavioural improvement. Principals explained that disciplinary correction becomes faster and more effective when parents actively cooperate with school authorities and reinforce behavioural expectations within home environments. Teachers similarly noted that students demonstrate stronger behavioural consistency when parents regularly monitor academic progress, communicate with teachers, and respond constructively to behavioural concerns.

Documentary evidence further confirmed that follow-up meetings with parents often resulted in reduced repetition of behavioural misconduct. These findings indicate that parental engagement extends behavioural accountability beyond school boundaries and creates consistency between institutional expectations and family-based behavioural reinforcement.

5.3 Hidden Punitive Practices Persist Despite Policy Restrictions

Although schools formally recognize child-friendly disciplinary policies, several participants acknowledged that punitive disciplinary practices continue to exist

informally. Some teachers admitted that strict punishment is occasionally viewed as necessary when dealing with serious behavioural misconduct. Observation notes similarly identified instances of public reprimands, classroom exclusion, emotional intimidation, and fear-based behavioural correction.

Document analysis further confirmed disciplinary incidents involving punitive responses despite formal policy restrictions. These findings reveal a clear tension between official policy commitments and practical disciplinary traditions. The persistence of punitive practices suggests incomplete institutional internalization of positive disciplinary reforms and continued dependence on traditional authority-based behavioural control.

5.4 Resource Constraints Limit Counselling Effectiveness

Participants consistently reported institutional limitations affecting the effective implementation of counselling-based interventions. Counselling teachers highlighted insufficient time allocation, excessive administrative responsibilities, limited professional training opportunities, and inadequate counselling facilities as major barriers. Principals similarly acknowledged that although counselling is institutionally valued, resource limitations often reduce the consistency and depth of implementation.

These findings indicate that institutional support structures significantly influence the effectiveness of counselling-based disciplinary interventions and suggest that policy implementation requires not only ideological commitment but also structural investment.

6. Discussion

The findings of the present study strongly support the theoretical assumptions of Albert Bandura and Barry Zimmerman. Bandura's Social Learning Theory explains that students acquire behavioural norms through observation, imitation, modelling, and reinforcement. When teachers adopt counselling-oriented disciplinary approaches, students are exposed to behavioural models characterized by empathy, dialogue, emotional regulation, and constructive conflict resolution. However, when punitive disciplinary practices continue to occur, students may internalize fear-based compliance rather than genuine behavioural transformation.

Zimmerman's Self-Regulated Learning Theory further explains that sustainable behavioural change requires students to engage in self-monitoring, reflective thinking, emotional regulation, and behavioural accountability. The present findings indicate that counselling directly supports these processes by encouraging students to recognize behavioural triggers, evaluate behavioural consequences, develop coping strategies, and regulate emotional responses.

The findings also demonstrate that parental engagement extends behavioural accountability beyond school boundaries by reinforcing behavioural consistency across multiple social environments. These findings are consistent with international studies that identify parent–school collaboration as an essential component of sustainable behavioural management.

One of the most significant contributions of the present study lies in identifying the policy–practice gap within school disciplinary implementation. Although national policy frameworks explicitly prohibit physical punishment and promote child-friendly disciplinary approaches, triangulated evidence obtained from questionnaires, interviews, observations, and document analysis revealed continuing exposure to punitive disciplinary practices. This discrepancy suggests that policy reform alone is insufficient unless accompanied by attitudinal transformation, professional development, institutional accountability, and continuous monitoring.

7. Conclusions

The present study examined the effectiveness of counselling and parental engagement as non-punitive disciplinary strategies in promoting student compliance with school rules and regulations in secondary schools in Sri Lanka. Using a descriptive mixed-methods research design, the study explored disciplinary practices through the perspectives of principals, teachers in charge of student discipline, counselling teachers, teachers, parents, and students. The integration of quantitative and qualitative evidence provided a comprehensive understanding of both institutional disciplinary practices and stakeholder experiences.

The findings demonstrate that student discipline remains a multidimensional challenge influenced by behavioural, emotional, institutional, social, and policy-related factors. Classroom disruption, late attendance, unauthorized absence, misuse of mobile phones, peer conflicts, inappropriate interpersonal relationships, and substance-related behaviours emerged as recurring disciplinary concerns across the sampled schools.

One of the most significant findings of the study concerns the widespread institutional acceptance of counselling as a primary behavioural intervention. All teachers in charge of student discipline reported regular use of counselling, and student responses demonstrated overwhelming preference for counselling-oriented interventions over punitive disciplinary practices. These findings indicate that counselling is increasingly recognized not only as a corrective mechanism but also as a developmental strategy capable of promoting emotional regulation, self-awareness, behavioural accountability, and long-term behavioural transformation.

The findings also demonstrate the important role of parental engagement in strengthening behavioural accountability. Regular communication between schools and families appears to contribute significantly to behavioural consistency and sustainable behavioural improvement.

However, one of the most critical findings relates to the policy–practice gap observed across schools. Although Ministry disciplinary regulations explicitly prohibit corporal punishment and promote child-friendly disciplinary management, student responses, observational evidence, and documentary records revealed continuing exposure to punitive disciplinary practices. This discrepancy highlights incomplete institutional internalization of policy reforms and suggests the continued influence of traditional disciplinary cultures.

Overall, the study concludes that counselling and parental engagement represent highly effective non-punitive disciplinary strategies capable of promoting sustainable behavioural change. However, successful implementation requires stronger institutional support, continuous professional development, enhanced policy monitoring, and deeper stakeholder collaboration.

8. Recommendations

Based on the findings of the study, several recommendations are proposed. First, all secondary schools should establish fully functioning counselling units staffed by professionally trained counselling personnel. Counselling should be integrated into school management as a permanent institutional service rather than an occasional intervention. Second, schools should strengthen parent–school partnerships through regular behavioural progress meetings, structured communication systems, and parent awareness programmes.

Third, teachers should receive continuous professional development in positive discipline, adolescent psychology, emotional intelligence, conflict resolution, and restorative classroom management. Fourth, school administrators should strengthen behavioural documentation systems to ensure accountability, transparency, and follow-up monitoring of disciplinary interventions.

At the policy level, educational authorities should strengthen monitoring mechanisms related to the implementation of Ministry disciplinary circulars. Annual institutional audits and standardized behavioural evaluation frameworks may support more consistent implementation of child-friendly disciplinary policies across schools.

9. Limitations of the Study

Although the study generated valuable insights, several limitations should be acknowledged. First, the study was limited to five Sinhala-medium secondary schools located within selected educational zones in Western Province, Sri Lanka. Consequently, the findings may not fully represent disciplinary practices across all school categories in the country. Second, the study focused primarily on 1AB and 1C schools, and behavioural patterns may differ in other school categories. Third, behavioural data were partially based on self-reported responses, which may have been influenced by social desirability bias. Finally, the cross-sectional design captured disciplinary practices at a specific point in time and therefore does not fully reflect long-term behavioural change.

10. Directions for Future Research

Future research may extend this study by examining disciplinary practices across urban, rural, mixed, boys', and girls' schools. Longitudinal studies may further evaluate the long-term effectiveness of counselling interventions. Comparative policy evaluation studies may also examine the implementation of Ministry disciplinary regulations across national school systems. In addition, future studies may explore the relationship between adolescent mental health, emotional wellbeing, and school disciplinary behaviour.

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Chapter 60: Spatio-Temporal Analysis of Urban Heat Island Dynamics in Guwahati City (2010–2025): A Remote Sensing Perspective on Urban Sustainability

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Abstract

Guwahati, called as the gateway of Northeast India has seen remarkable urban transformation over the last years. Rapid urbanization and unplanned land use changes have significant impact on the urban temperature dynamics of the city. The expansion of built-up areas and decline of vegetation cover and wetland characteristics have created Urban Heat Island (UHI) effects in the city. This is a serious challenge to sustainable urban development. The present study evaluates the spatio-temporal dynamics of land use change and its impact on Land Surface Temperature (LST), UHI intensity, and Urban Ecological Vulnerability between 2010 and 2025 using Remote Sensing and GIS techniques. The satellite imageries from Landsat for 2010 and 2025 was used to prepare Land Use/Land Cover (LULC), Normalized Difference Vegetation Index (NDVI), Normalized Difference Built-up Index (NDBI), and LST maps. UHI intensity was derived from the temperature difference between urban and non-urban areas. The Urban Ecological Vulnerability Index (UEVI) was generated through weighted overlay analysis integrating LST, NDVI, NDBI, and LULC maps. Change detection analysis was further carried out to assess the vulnerable areas and ecological transformation in the study area over time. The findings reveal a substantial increase in built-up areas and impervious surfaces and a decline in vegetation cover and open areas. The maximum LST increased from 29.07°C in 2010 to 32.35°C in 2025. This indicates a very high urban temperature condition. The UEVI analysis also demonstrated a major shift from low and moderate vulnerable areas toward highly vulnerable areas. This creates stress and health hazards in the peak warm days. However, wetlands, vegetated areas, river sides, and forested hill regions provide a cooling effect by moderating temperature. The study signifies the effectiveness of Remote Sensing and GIS for urban environmental monitoring and provides valuable insights for sustainable urban planning, wetland conservation, urban greening, and climate-resilient development strategies.

Key words: UHI, LST, UEVI, Remote Sensing& GIS, Urbanisation, Urban Sustainability.

INTRODUCTION

Rapid urbanization worldwide has transformed natural landscapes into dense built-up environment. This has basically altered the local climate of specific areas. It is projected that 68% of the world's population will be urbanized by 2050 (Desa, U. N., 2014). This shift from natural landscapes to impervious surfaces, such as concrete and asphalt modifies the surface energy balances because of their high thermal inertia and low albedo (Priyadarshni & Pandey, 2025). This creates the Urban Heat Island (UHI) effect. In these heat islands, urban centers maintain significantly higher temperatures than their rural surroundings. This leads to increased cooling energy demand and health hazards (Priyadarshni & Pandey, 2025; Mirza, et.al., 2026).

The Urban Heat Island (UHI) effect in the world, is becoming more severe. It is the result of combined influence of rapid urbanization and climate change. Cities, like New York, Tokyo are recording higher nocturnal temperatures. While UHI is a global phenomenon, its intensity in India is also severe. Major Indian cities frequently record UHI intensities ranging from 2°C to 5°C, with peaks in night time often being more consequential than daytime variations (Mirza, et.al., 2026). Vulnerable populations in Indian metropolises face extreme heat stress. This is worsened by high humidity and the lack of adequate green infrastructure (U.S. EPA, 2025 & Priyadarshni & Pandey, 2025). Guwahati, the "Gateway to Northeast India," is one of the fastest-growing cities in the country. Its strategic location on the Brahmaputra River and its unique topography of hills and alluvial plains create a distinct microclimatic setting (Mohammad & Goswami, 2022). The city witnessed a 147.5% increase in built-up land, between 1995 and 2020 (Mohammad & Goswami, 2022). The city's ecological health is under severe threat as the population projected to reach 2.8 million by 2025 (Talukdar & Arsac, 2020).

Most existing research concludes around 2020 (Choudhury, 2023). There is a lack of analysis integrating 2024–2025 data to capture current thermal intensity. Few studies directly correlate thermal dynamics with the spatial targets of the Guwahati Master Plan 2025 (Sen, 2019 & GMDA 2009). There is also a

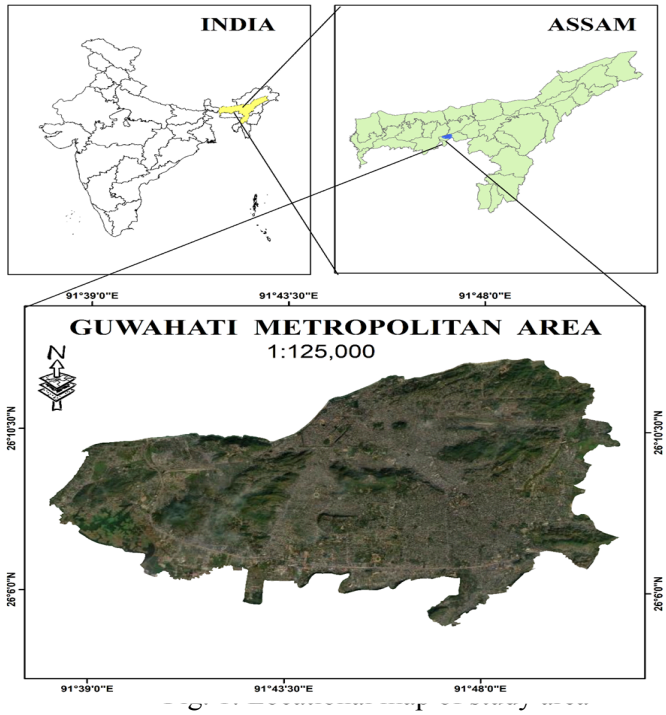
need for research that combines UHI (Urban Heat Intensity) with the latest high-resolution Landsat 9 data to assess sustainability (Mohammad & Goswami, 2022; Talukdar & Arsac, 2020). The present study aims to examine the spatio-temporal dynamics of the Urban Heat Island (UHI) effect in Guwahati between 2010 and 2025 using Remote Sensing and GIS techniques, with a focus on identifying UHI intensity zones and hotspots associated with rapid urbanization. It further seeks to assess the environmental impacts of urban expansion on urban thermal conditions and sustainability, while proposing climate-resilient and sustainable urban planning strategies to mitigate UHI effects in the city. This study offers the most recent assessment of Guwahati's thermal evolution by integrating historical trends with observed outcome from 2025. This study is the first to examine Urban Heat Island (UHI) dynamics in Guwahati through the perspective of the "Guwahati Master Plan 2025."

STUDY AREA

Guwahati is located on the bank of bank of the Brahmaputra River in the Kamrup Metropolitan district of Assam, India. It extends from 26°05′ N to 26°15′ N latitudes and 91°35′ E to 91°55′ E longitudes (Mohammad and Goswami, 2022). The Guwahati Metropolitan Area (GMA) covers approximately 556 sq. km, while the Guwahati Municipal Corporation (GMC) manages the core urban area of about 328 sq. km (GMDA, 2009).

The city experiences Subtropical Monsoon Climate (Cwa). It faces high humidity and heavy rainfall, primarily during the monsoon period from June to September. The mean yearly rainfall is approximately 1,722 mm (Choudhury et al., 2023). Temperatures typically vary between a minimum of 10°C in winter to a maximum of 38°C in summer. Recent UHI studies have noted an increase in localized thermal peaks exceeding these historical averages (Mohammad and Goswami, 2022). Guwahati's landscape is a complex mosaic of residual hills (outliers of the Shillong Plateau) and alluvial plains. Important hills, such as Nilachal, Nabagraha, and Narakasur are responsible for the undulating topography. The drainage system is dominated by the Brahmaputra River to the north and several internal channels like the Bharalu, Bahini, and Basistha rivers (GMC, 2024). The city also consists of critical wetlands like the Deepor Beel (a Ramsar site), Borsola beel, Silsako beel, etc. these wetlands serve as a natural storm-water reservoir but has faced significant encroachment due to urban sprawl (Talukdar & Arsac, 2020).

The urban form of Guwahati has evolved from a compact colonial core into a sprawling, multi-nodal structure. The shift of the state capital-headquarter to Dispur in 1972 triggered rapid southward expansion along the G.S. Road corridor. As per 2011 Census, the population was 9.63 lakh. However, current estimates for 2025 reveals the metropolitan population to be approximately 1.26 million (World Population Review, 2024). Governance is divided between the Guwahati Municipal Corporation (GMC) and the Guwahati Metropolitan Development Authority (GMDA). While GMC handles civic services, GMDA is responsible for long-term planning and the implementation of the Master Plan for Guwahati 2025 (GMDA, 2009). The GMA occupies 1% of the total area of north-east India. It is regarded as the gateway to northeast India because of its prime location and socio-economic significance (Pawe and Saikia, 2018).



Source: Author Creation

MATERIALS AND METHODS

Materials

The present study investigates the spatio-temporal dynamics of the Urban Heat Island (UHI) effect in Guwahati between 2010 and 2025 using remote sensing and GIS techniques. Multi-temporal satellite datasets were utilized to analyze changes in Land Use/Land Cover (LULC), vegetation condition, built-up expansion, and land surface temperature patterns. Satellite imageries for the year 2010 were obtained from Landsat 5 TM, while imagery for the year 2025 was acquired from Landsat 9. Thermal infrared bands were employed for Land Surface Temperature (LST) retrieval. Multispectral bands were used for deriving LULC, NDVI, and NDBI maps. The satellite data were downloaded from USGS EarthExplorer. Additional reference data were obtained using Google Earth Pro. Spatial analysis and image processing were carried out in ArcGIS.

Methodology

Image Preprocessing

The downloaded satellite images were pre-processed. Pre-processing procedures include radiometric correction, atmospheric correction, geometric correction, layer stacking, and image clipping to the administrative boundary of Guwahati city. False Colour Composite (FCC) images were prepared for visual interpretation and classification purposes.

Land Use/Land Cover (LULC) Classification

Supervised classification was performed using the Maximum Likelihood Classification (MLC). This was applied to generate LULC maps for 2010 and 2025. The classified images were categorised into major land-use classes such as: Built-up area, Dense Vegetation, Water bodies and Mixed vegetaion.

NDVI Analysis

Vegetation dynamics were assessed using the Normalized Difference Vegetation Index (NDVI). It was derived from near-infrared and red spectral bands.
The NDVI was calculated using:

$$NDVI = \frac{NIR-Red}{NIR+Red}$$

Higher NDVI values indicate dense vegetation cover, whereas lower values represent sparse vegetation and urban surfaces.

NDBI Analysis

Urban built-up expansion was analyzed using the Normalized Difference Built-up Index (NDBI), calculated from SWIR (Short-wave Infrared) and NIR bands.
The NDBI was computed using:

$$NDBI = \frac{SWIR-NIR}{SWIR+NIR}$$

Positive NDBI values indicate built-up areas, while negative values represent vegetation and water bodies.

Land Surface Temperature (LST) Retrieval
Land Surface Temperature (LST) was derived from the thermal infrared Surface Temperature bands of Landsat 5 TM (2010) and Landsat 9 (2025) using raster calculations in ArcGIS. The thermal band values were converted into degrees Celsius using scaling factors provided in the Landsat metadata files.
The LST was calculated using the following equation:

$$LST = (ST\ band \times 0.00341802 + 149.0) - 273.15$$

where:
ST represents the thermal surface temperature band,
0.00341802 is the multiplicative rescaling factor,
149.0 is the additive rescaling factor, and
273.15 is used to convert temperature from Kelvin to degrees Celsius

Urban Heat Island (UHI) Mapping and Vulnerability Analysis
Urban Heat Island intensity was calculated by comparing urban surface temperature with the background rural or non-urban temperature. The UHI intensity was estimated using the following relation:

$$UHI = T_{urban} - T_{rural}$$

Where:

T_{urban} = Land Surface Temperature of urban/built-up areas

T_{rural} = Land Surface Temperature of surrounding rural or vegetated areas

Weighted Overlay Analysis was performed to identify areas vulnerable to Urban Heat Island effects. The analysis was conducted in a GIS environment using equal-weight raster multi-criteria evaluation techniques (MCE). Several thematic

layers influencing urban thermal characteristics were selected for the analysis. These included: Land Surface Temperature (LST), Normalized Difference Vegetation Index (NDVI), Normalized Difference Built-up Index (NDBI), and Land Use/Land Cover (LULC). Each thematic layer was converted into raster format with uniform spatial resolution and projection system. The raster layers were then reclassified into vulnerability classes based on their contribution to Urban Heat Island formation. An equal weight MCE approach was adopted to avoid subjectivity or regional bias in the factors. Each of the four selected environmental indicators represents an equally critical thermal dimension of the urban environment. The weighted overlay operation was performed using the following equation:

$$S = \sum_{i=1}^{n} W_i X_i$$

where:

S= Final weighted overlay score

W_i= Weight assigned to each thematic layer

X_i= Reclassified raster value of each parameter

n= Number of thematic layers used in the analysis

Change Detection Analysis

Post-classification change detection analysis was performed to assess the temporal dynamics of the Urban Ecological Vulnerability Index (UEVI) between 2010 and 2025. The UEVI maps were normalized and classified into five fixed vulnerability categories ranging from low to severe vulnerability. A Combinatorial Raster Overlay and cross-tabulation analysis were then conducted in ArcGIS to identify changes in ecological vulnerability across the study area. The vulnerability dynamics (VD) were calculated using:

$$VD = UEVI_{2025} - UEVI_{2010}$$

The resultant map was categorized into stable zones, degraded zones, and improved zones. Finally, pixel counts were converted into area statistics (km^2) using the spatial resolution of Landsat imagery to quantify the extent of ecological change over time.

Table 1: Details of the materials used in the study

Data/Parameter	Source	Purpose	Output
Landsat 5 TM (2010)	USGS EarthExplorer	Baseline spatial analysis	LULC, NDVI, NDBI, LST
Landsat 9 (2025)	USGS EarthExplorer	Recent spatial analysis	LULC, NDVI, NDBI, LST
Thermal Bands	Landsat imagery	Temperature retrieval	LST maps
NDVI	NIR & Red bands	Vegetation analysis	Vegetation density map
NDBI	SWIR & NIR bands	Built-up analysis	Urban expansion map
Google Earth Pro	Reference data	Accuracy assessment	Confusion matrix & Kappa coefficient
ArcGIS	Spatial analysis	GIS processing	Thematic maps & overlays

Source: Author Creation

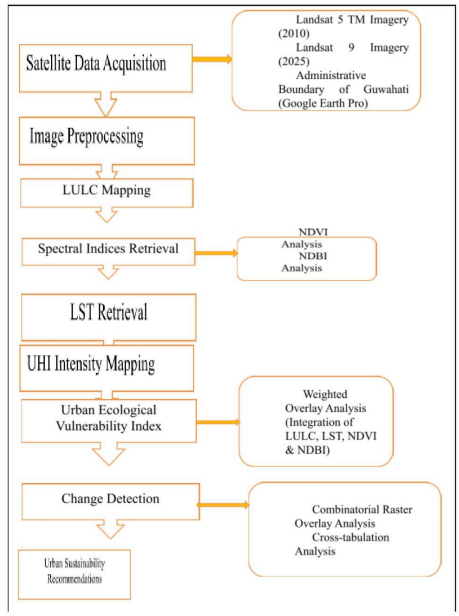


Fig. 2: Methodological flow chart of the study

Source: Author Creation

RESULT AND DISCUSSION

Land Use/Land Cover (LULC) Change Analysis

The Land Use / Land Cover (LULC) analysis of Guwahati for 2010 and 2025 shows a rather big spatial shift, which seems to be pushed by fast urbanization and new infrastructure building. In this study, four main LULC classes were picked out: built-up area, dense vegetation, sparse/mixed vegetation, and waterbodies. From the classified maps (Fig. 3a and 3b) it looks like built-up land grows quite a lot, while vegetation, and even the water-related features, go down over these 15 years.

Built-up area goes up strongly, from 92.27 sq. km in 2010 to 124.06 sq. km in 2025. This pattern points to rapid population growth and ongoing city expansion. The increase did not happen in one way only, it happened by densification inside the city core too, and at the same time it spread outward toward peri-urban fringes. This kind of urban sprawl behavior, has also been reported for other fast-growing Indian towns (Ramachandra et al., 2014; Taubenböck et al., 2009). Meanwhile dense vegetation drops from 66.64 sq. km to 38.39 sq. km, so it suggests strong conversion of green cover, mainly because of urban encroachment plus road and facility development. Also, sparse/mixed vegetation fell from 16.04 sq. km to 13.05 sq. km, and that kind of reduction can weaken ecological buffer functions, and reduce urban environmental resilience.

Waterbodies, reduced from 1.25 sq. km in 2010, to 0.70 sq. km in 2025. A likely reason could be wetland encroachment, sedimentation, and land reclamation actions over time. When these water features shrink, urban hydrology gets affected, groundwater recharge can decline, and flood regulation becomes less effective (Sharma and Joshi, 2013; Singh et al., 2014). Altogether, the LULC shift in Guwahati basically highlights that rapid urban growth is happening largely at the cost of natural land cover, and that is probably related to rising land surface temperatures, along with stronger Urban Heat Island (UHI) impacts.

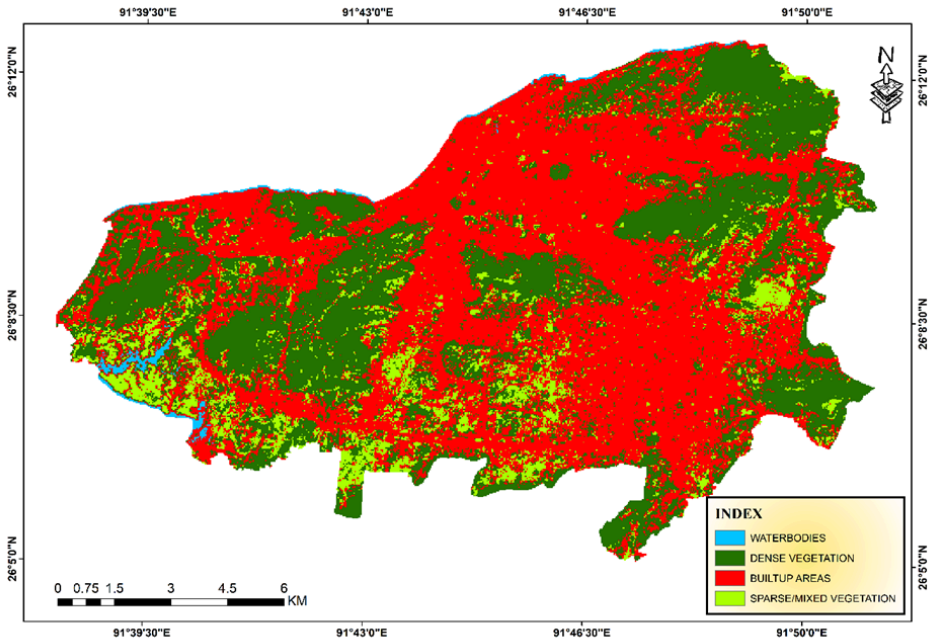


Fig. 3(a): LULC Map of 2010

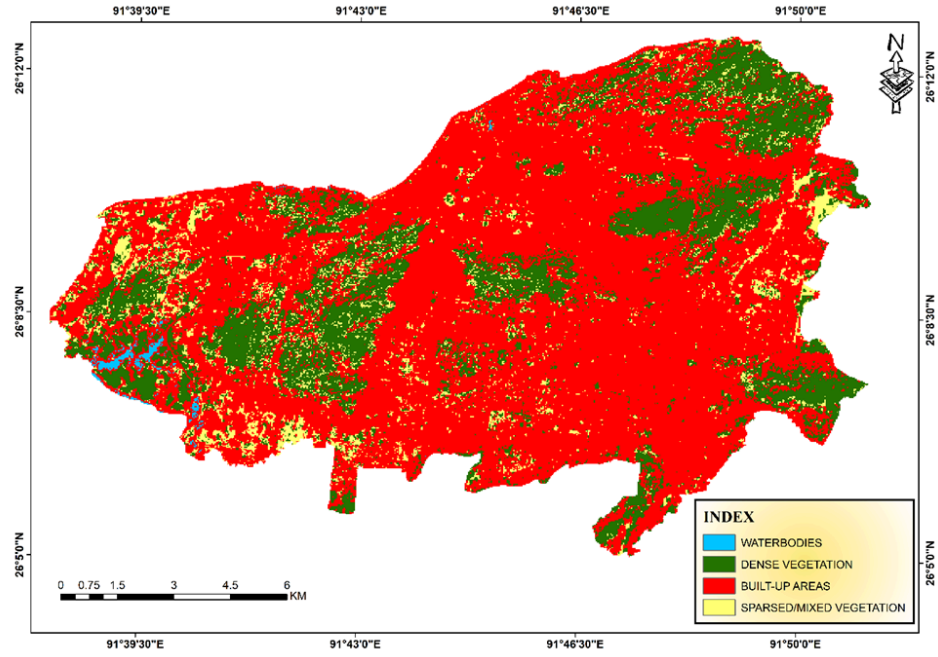


Fig. 3(b): LULC Map of 2025

Table 2: Comparative LULC Statistics of Guwahati (2010–2025)

LULC Class	Area in 2010 (sq. km)	Area in 2025 (sq. km)	Change (sq. km)	Percentage Change (%)
Built-up Area	92.2698	124.0605	+31.7907	+34.45
Dense Vegetation	66.6441	38.3877	-28.2564	-42.40
Sparse/Mixed Vegetation	16.0398	13.0482	-2.9916	-18.65
Waterbodies	1.2469	0.6957	-0.5512	-44.20

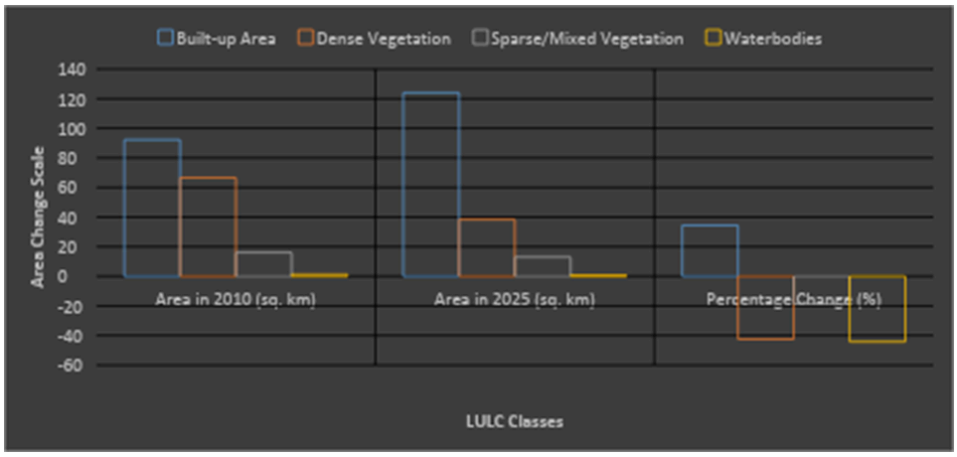


Fig. 3(c): LULC Comparison Graph

Source: Author Creation

NDVI Analysis

The Normalized Difference Vegetation Index (NDVI) analysis was carried out to evaluate the spatial and temporal variation of vegetation cover in Guwahati between 2010 and 2025. NDVI is one of the most widely used remote sensing indices for monitoring vegetation health, density, and distribution. It effectively distinguishes vegetated areas from non-vegetated areas (Rouse et al., 1974). Higher positive NDVI values indicate dense and healthy vegetation, whereas lower or negative values represent built-up surfaces, barren land and waterbodies.

The NDVI maps of 2010 in fig.4(a) and 2025 in fig.4(b) reveal significant changes in vegetation distribution across the study area. In 2010, large portions of the outskirts and hilly regions of Guwahati displayed high NDVI values. It indicates the presence of dense vegetation and relatively healthy green cover. On the other hand, by 2025, the extent of high NDVI zones had considerably decreased. Low NDVI regions associated with built-up surfaces expanded substantially. This pattern clearly reflects the impact of rapid urbanization and infrastructure development on the natural vegetation cover of the city.

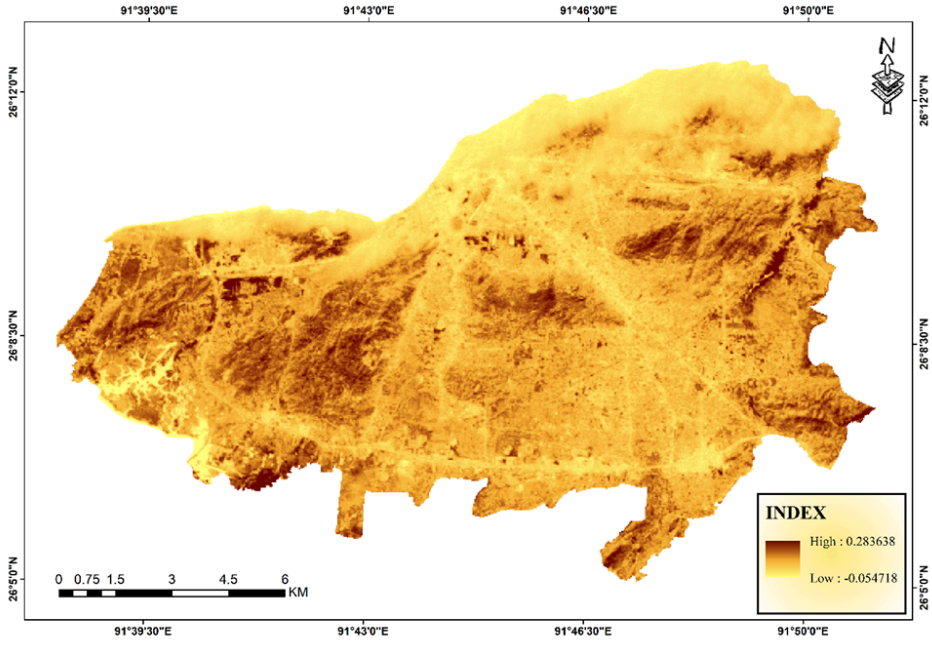


Fig. 4(a): NDVI Map of 2010

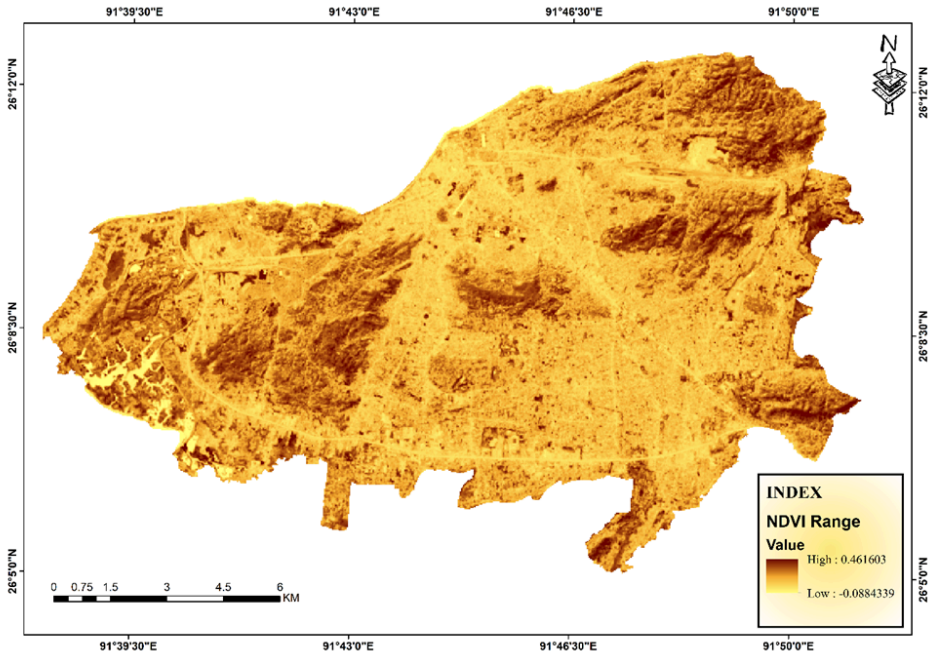


Fig. 4(b): NDVI Map of 2025

The mean NDVI values also indicate a noticeable decline in overall vegetation health and density between 2010 and 2025. The reduction in mean NDVI reflects the conversion of vegetated land into impervious built-up surfaces due to expanding residential areas, transportation infrastructure, and commercial activities. Urban growth has fragmented the continuous vegetation patches into smaller and isolated greenspaces Vegetation fragmentation is one of the major environmental consequences of rapid urban expansion. Fragmented vegetation patches often experience reduced ecological functioning, lower biodiversity support, and weakened resilience against environmental hazards. In Guwahati, the fragmentation of greenspaces appears particularly prominent around newly urbanized peri-urban zones and transportation corridors. Similar observations have been seen in rapidly urbanizing cities. In these cities, increasing urban sprawl leads to the breakdown of continuous vegetation cover into scattered patches (Seto et al., 2012; Zhang et al., 2013).

The decline in NDVI values has important implications for the urban thermal environment. Vegetation plays a critical role in regulating land surface temperature through shading and evapotranspiration processes.

The reduction of urban green cover in Guwahati suggests a weakening of the natural cooling mechanism within the city. The decline in vegetation density and

fragmentation of green spaces contribute significantly to the intensification of Urban Heat Island (UHI) conditions. Preserving existing vegetation and promoting urban greening initiatives such as parks, green corridors, and urban forestry can help mitigate thermal stress and improve urban environmental sustainability.

NDBI Analysis

The Normalized Difference Built-up Index (NDBI) analysis was carried out to examine the spatial expansion and concentration of built-up areas in Guwahati between 2010 and 2025. The NDBI maps in fig.5(a) and 5(b) demonstrate a substantial increase in urbanised surfaces across the study area during the 15-year period.

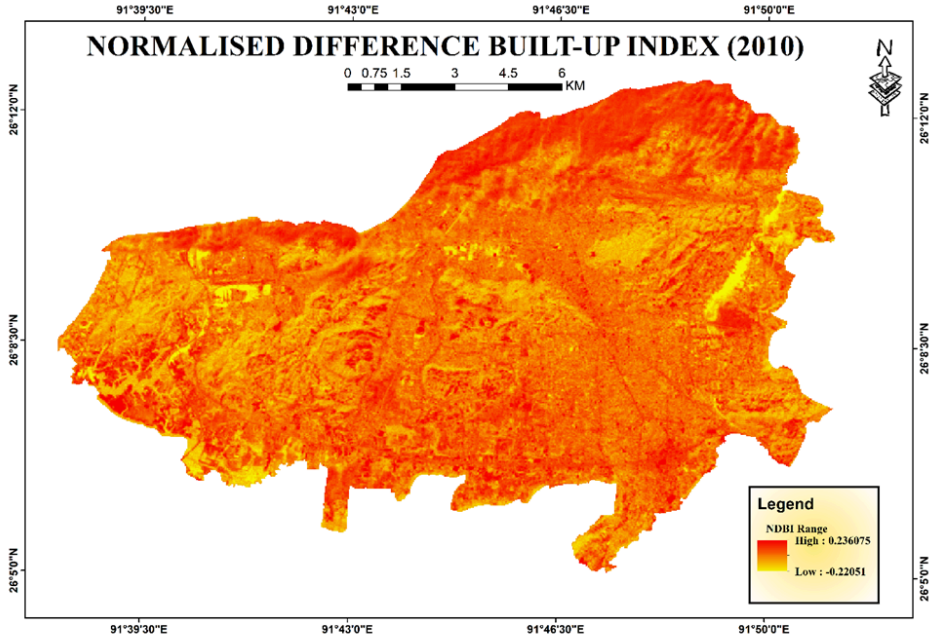


Fig. 5(a): NDBI Map of 2010

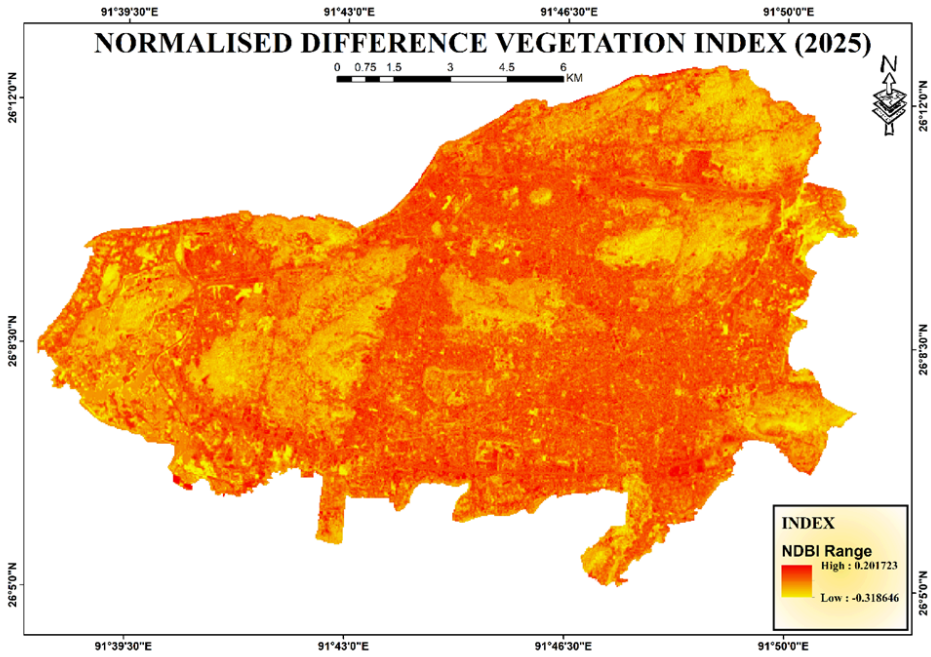


Fig. 5(b): NDBI Map of 2025

In fig. the 2010 NDBI map indicates comparatively lower built-up intensity. High NDBI values primarily concentrated within the central urban core of Guwahati. Peripheral regions during this period were still characterized by moderate vegetation cover, wetlands, and open spaces. Contrastingly, the 2025 NDBI map in fig reveals significant spatial expansion of high NDBI values toward the urban fringes. This indicates accelerated urban growth and increasing impervious surface development. Rapid urbanization was also evident along major transportation corridors and newly developing residential and commercial sectors.

The observed increase in NDBI values shows intense urban densification. This mainly results from population growth, infrastructural development, and horizontal urban sprawl. Expansion of residential colonies, commercial complexes, transportation infrastructure, and institutional establishments has highly transformed the natural landscape of the city. Similar findings have been found in several urban heat island studies. In these studies, increasing built-up density was found to be strongly associated with rapid urban expansion and land transformation (Zha et al., 2003; Weng, 2009).

The expansion of impermeable surfaces plays a critical role in modifying the urban thermal environment. Built-up materials such as concrete, asphalt, and roofing structures possess high heat absorption and storage capacities. These materials contribute significantly to high land surface temperatures. Areas exhibiting high NDBI values in the present study were found to geographically correspond with zones of higher Land Surface Temperature (LST). This indicates a strong relationship between urban expansion and thermal intensification. This spatial association suggests that increasing built-up density has amplified the Urban Heat Island (UHI) effect across Guwahati city. The comparative analysis further demonstrates that regions characterized by low vegetation cover and high built-up concentration exhibited relatively higher thermal signatures. Whereas vegetated and wetland areas showed lower NDBI and comparatively cooler surface temperatures. Such findings are as per with earlier studies which reported a positive relationship between NDBI and LST in rapidly urbanizing cities (Chen et al., 2006; Yue et al., 2007). The increase in built-up surfaces reduces evapotranspiration and enhances heat retention. This has also significantly altered the urban microclimate of Guwahati over the period. Therefore, the present study signifies the urgent need for sustainable urban planning measures, including the preservation of urban green spaces, wetland conservation, and incorporation of green infrastructure to mitigate future thermal stress and environmental degradation.

LST Analysis

The spatial distribution of Land Surface Temperature (LST) for the years 2010 and 2025 reveals significant thermal variations across the study area. This indicates a noticeable increase in surface temperature over the fifteen-year period. The LST maps demonstrate the influence of rapid urban expansion, reduction of vegetation cover, and increasing impervious surfaces on the thermal environment.

Table 3: LST Statistics of the Study Area

Year	Minimum LST (°C)	Maximum LST (°C)	Approximate Mean LST (°C)
2010	14.10	29.07	~22–23
2025	18.19	32.35	~25–26

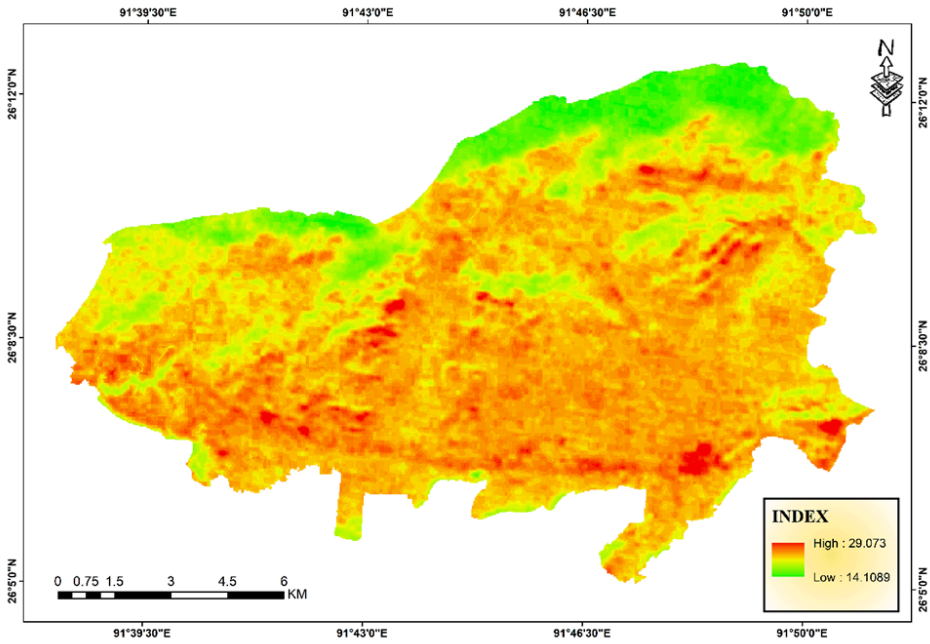


Fig. 6(a): LST Map of 2010

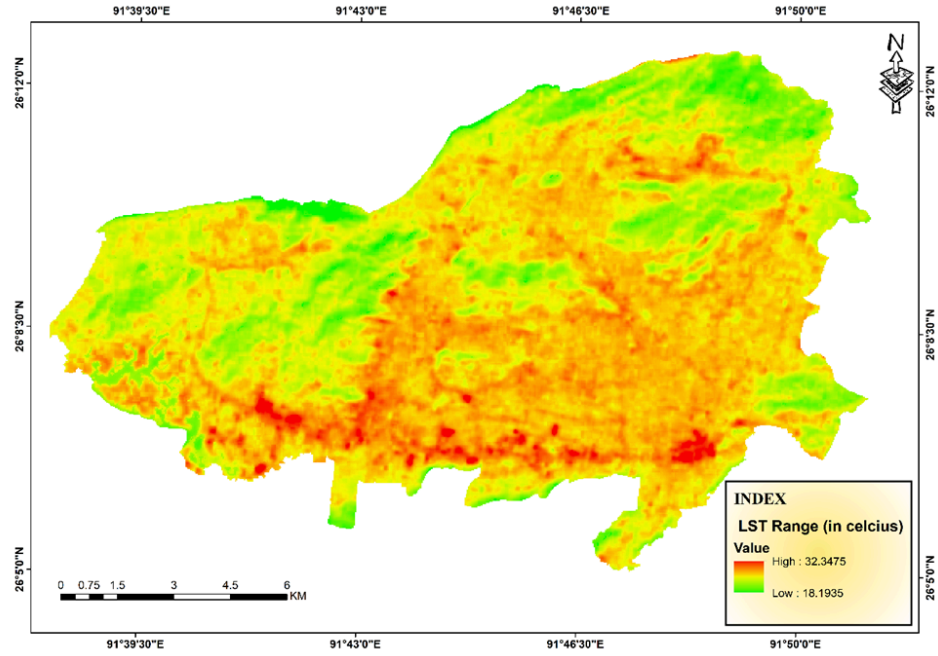


Fig. 6(b): LST Map of 2025

The LST map of 2010 in fig. 6(a) shows comparatively moderate thermal conditions. Here, most parts of the study area were dominated by low to medium temperature zones ranging between 20°C and 26°C. Cooler temperature zones were primarily concentrated in vegetated and elevated northern portions of the city, represented by green shades. In contrast, relatively higher temperature pockets were observed in densely built-up and barren regions, particularly in the southern and central urban sectors. The maximum LST recorded during 2010 was approximately 29.07°C, while the minimum temperature was around 14.10°C.

By 2025, the thermal characteristics of the study area changed considerably. The LST map in fig.6(b) indicates a clear expansion of high-temperature zones, particularly in the southern, south-western, and central urbanized regions. The maximum LST increased to approximately 32.35°C, whereas the minimum LST also rose significantly to about 18.19°C. The increase in both minimum and maximum temperature values suggest an overall warming trend across the urban landscape. Areas previously characterized by moderate temperatures transformed into high-temperature hotspots, indicating intensified urban heat island (UHI) conditions.

The increase in LST between 2010 and 2025 can largely be attributed to rapid urbanization, increasing built-up surfaces, road networks, and reduction in vegetation cover. Impervious surfaces such as concrete structures, asphalt roads, and commercial complexes absorb and retain solar radiation, thereby increasing surface temperature. Similar observations have been reported by numerous studies. They indicate a strong relationship between urban expansion and rising LST values (Weng, 2001; Voogt & Oke, 2003). Urban surfaces generally possess lower albedo and reduced evapotranspiration capacity compared to vegetated areas. A distinct thermal contrast between urban and vegetated regions is clearly visible in both maps. Vegetated areas, wetlands, and forested hill slopes consistently exhibited lower temperatures due to evapotranspiration and shading effects. In contrast, built-up zones showed higher LST values because of anthropogenic heat emissions and surface sealing. This inverse relationship between vegetation and LST has also been highlighted in previous urban climate studies (Gallo et al., 1993; Buyantuyev & Wu, 2010). The presence of cooler zones in areas with higher vegetation cover confirms the vital role of green spaces in regulating urban microclimate. The expansion of thermal hotspots in 2025 reflects the increasing intensity of the Urban Heat Island (UHI) effect

within the city. The conversion of open land and vegetation into residential and commercial infrastructures has accelerated heat accumulation. Such thermal intensification may have adverse implications on energy consumption, public health, and urban sustainability if appropriate mitigation measures are not implemented. The findings emphasize the importance of sustainable urban planning, protection of wetlands and vegetation, and incorporation of urban green infrastructure to mitigate future thermal stress.

UHI Intensity Mapping

The Urban Heat Island (UHI) intensity maps for 2010 and 2025 reveal significant spatial and temporal variations in thermal conditions across the study area. The analysis shows the emergence and expansion of urban thermal hotspots associated with rapid urbanization, increasing impervious surfaces, and declining vegetation cover. The UHI intensity zonation was classified into four categories: Low, Moderate, High, and Very High intensity zones.

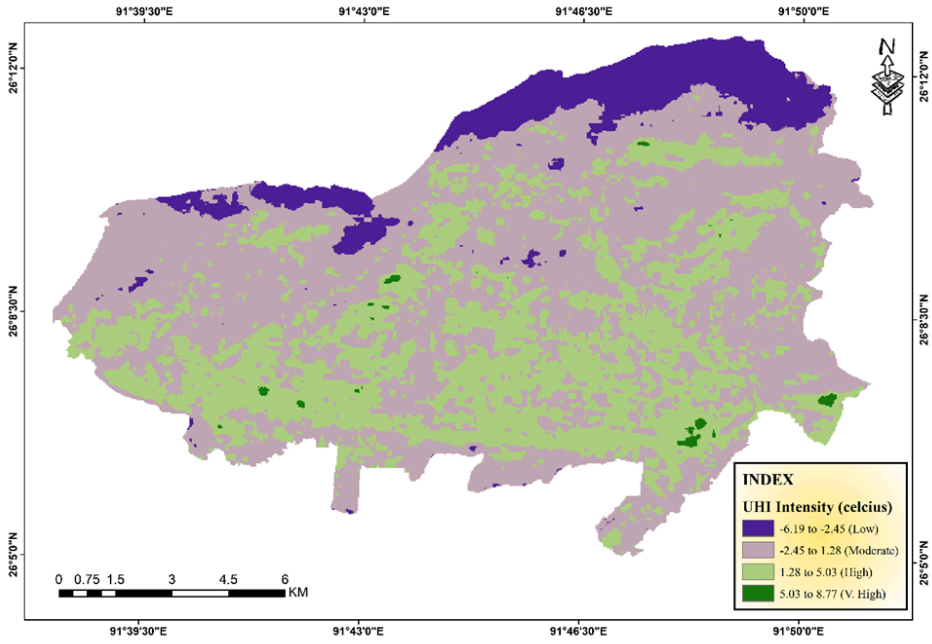


Fig. 7(a): UHI Intensity Map of 2010

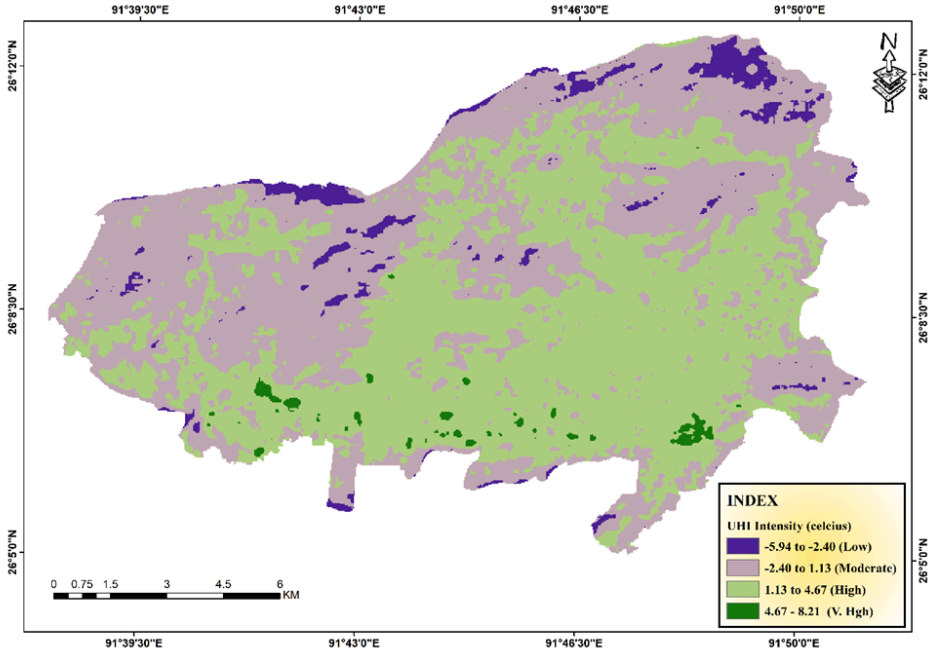


Fig. 7(b): UHI Intensity Map of 2025

UHI Category	2010 (°C)	2025 (°C)
Low	-6.19 to -2.45	-5.94 to -2.40
Moderate	-2.45 to 1.28	-2.40 to 1.13
High	1.28 to 5.03	1.13 to 4.67
Very High	5.03 to 8.77	4.67 to 8.21

Table 4: UHI Intensity Classification

Source: Author Creation

The UHI intensity map of 2010 in fig.7(a) indicates that moderate UHI conditions dominated a major portion of the study area, particularly within the central urban landscape. High and very high UHI intensity zones were mainly

concentrated in densely built-up southern and south-eastern parts of the city. Here, urban activities, transportation infrastructure, and commercial developments are more prominent. These areas acted as core thermal hotspots due to higher concentrations of impervious surfaces and anthropogenic heat emissions. Conversely, the northern and north-eastern hill regions exhibited low UHI intensity values. These regions are cooler due to dense vegetation cover, elevated terrain and river-side location. By 2025, as seen in fig. 7(b), a considerable spatial expansion of high and very high UHI intensity zones is evident. The thermal hotspot regions became more continuous and extensive, particularly across the southern urban corridor and central built-up areas. The increase in high-intensity thermal zones suggests a progressive intensification of the Urban Heat Island effect over the fifteen-year period. Areas that previously exhibited moderate UHI intensity in 2010 transitioned into high-intensity zones in 2025. This reflects the rapid conversion of vegetated and open lands into residential, commercial, and transportation infrastructures.

The main factors responsible for growth of thermal stress zones are accelerated urban expansion and land use transformation. Increased built-up density, surface sealing, and reduction of natural vegetation reduce evapotranspiration and increase heat absorption capacity. These changes intensify urban warming. Such patterns have been observed in rapidly urbanising cities of the world. In these cities, expansion of impervious surfaces significantly contributes to high urban temperatures (Oke, 1982; Weng et al., 2004). The persistence and expansion of UHI hotspots indicate increasing thermal discomfort and environmental stress within the urban ecosystem. A notable temperature difference exists between urbanized areas and vegetated or wetland regions. The maps clearly demonstrate that areas containing vegetation, forest cover, and wetlands maintained comparatively lower UHI intensity values throughout both years. Wetlands and green spaces act as natural cooling zones by facilitating evapotranspiration, moisture retention, and shading effects. In the study area, cooler zones are prominently visible in northern hill regions, river floodplain and selected vegetated patches. The cooling influence of wetlands is particularly significant in reducing localised heat accumulation. Wetland ecosystems possess high moisture content and lower heat storage capacity, which help regulate surrounding microclimatic conditions. Previous studies have similarly reported that urban wetlands and green infrastructure substantially mitigate Urban Heat Island intensity by lowering surface and atmospheric temperatures (Rizwan & Dennis, 2008; Bowler et al., 2010). Therefore, the

degradation or encroachment of wetlands may further aggravate thermal stress in future years.

The observed increase in UHI intensity between 2010 and 2025 indicates growing urban thermal vulnerability within the city. Expansion of thermal hotspots may negatively affect human health, energy consumption, air quality, and overall urban livability. The findings therefore hint towards the necessity of sustainable urban planning measures. These measures include preservation of wetlands, expansion of urban green spaces, implementation of green roofs, and promotion of climate-sensitive land use planning to reduce future thermal stress.

UEVI Analysis

The Urban Ecological Vulnerability Index (UEVI) analysis was carried out to evaluate the spatial distribution of thermal stress and environmental vulnerability within the study area during 2010 and 2025. The index was generated using weighted overlay analysis integrating multiple environmental indicators such as Land Surface Temperature (LST), Land Use/Land Cover (LULC), Normalized Difference Vegetation Index (NDVI), and Normalized Difference Built-up Index (NDBI). The resulting UEVI maps classify the study area into five vulnerability categories: Very Low, Low, Moderate, High, and Very High ecological vulnerability.

The UEVI map of 2010 in fig. 8(a) indicates that the study area predominantly had low to moderate ecological vulnerability. Large portions of the northern and north-western regions exhibited low vulnerability zones, represented by green shades. These areas are mainly associated with vegetation cover, hill ecosystems, river floodplain, and comparatively lower urban density. Moderate vulnerability zones were distributed across transitional landscapes and semi-urban areas. High and very high vulnerability zones were relatively limited and concentrated primarily in the southern and central built-up regions. In these regions, urban expansion, transportation corridors, and commercial activities were more intense. However, the UEVI map of 2025 in fig. 8(b) reveals a drastic increase in ecological vulnerability throughout the study area. Very high vulnerability zones expanded substantially and became dominant across central, southern, and eastern urban regions. The spatial continuity of red-colored zones indicates intensified ecological stress. This stress result from rapid urbanization

and increasing anthropogenic pressure. Areas previously categorized as moderate or high vulnerability in 2010 transitioned into very high vulnerability zones by 2025. Thus, it demonstrates a significant deterioration of urban ecological conditions over the fifteen-year period.

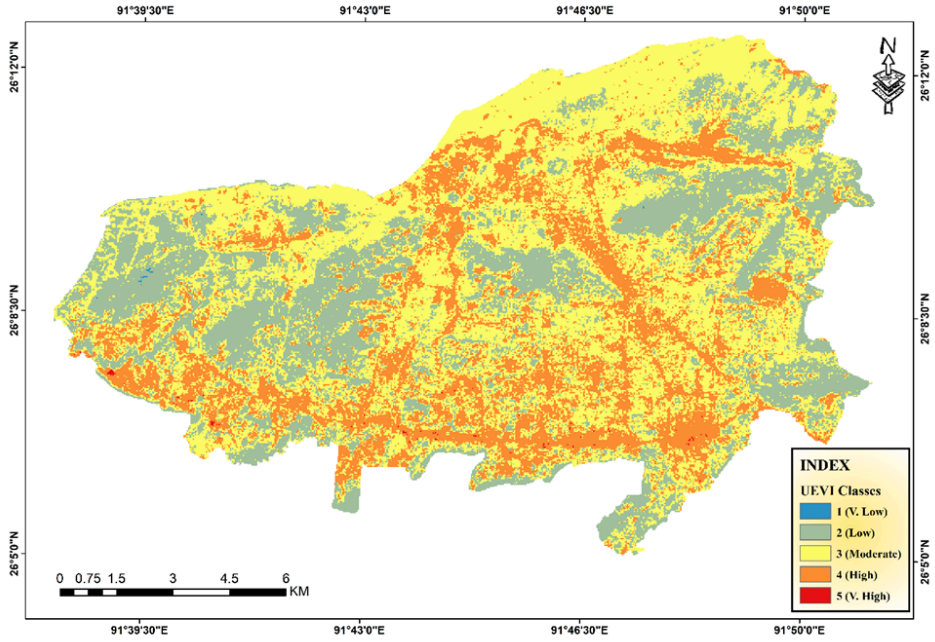


Fig. 8(a): UEVI Map of 2010

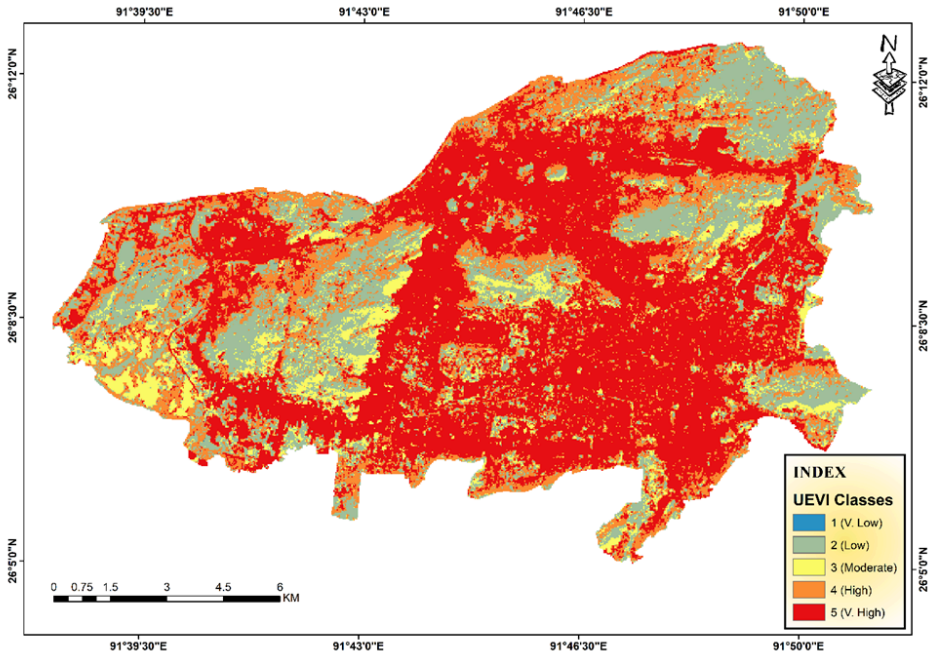


Fig. 8(b): UEVI Map of 2025

The observed increase in ecological vulnerability is closely linked to rapid land use chance, loss of vegetation cover, expansion of concrete surfaces, and rising land surface temperatures. In the works of Hong et al., 2016 and Lan et. al., 2023, similar findings have been found. The expansion of urban infrastructure and associated anthropogenic activities contribute to ecological imbalance by altering surface energy balance and reducing ecosystem services. A strong spatial relationship is evident between high UEVI zones and areas of high UHI intensity and NDBI values. Densely built-up urban cores exhibited greater ecological vulnerability due to high thermal pressure, reduced infiltration, and limited vegetation cover. In contrary to it, regions with dense vegetation, wetlands, river sides, and forested hill slopes consistently demonstrated lower ecological vulnerability. Vegetation-rich areas help regulate microclimatic conditions, reduce thermal discomfort, and maintain ecological stability through evapotranspiration and carbon sequestration processes. The comparatively low vulnerability observed in vegetated hill regions and wetland-associated zones confirms the ecological significance of natural land covers in mitigating urban environmental discomfort. Previous studies by Pickett

et al., 2011 and Gao et al., 2021 have also pointed out that urban green infrastructure and wetland ecosystems significantly improve urban sustainability.

The considerable increase in high and very high vulnerability zones by 2025 indicates growing ecological instability and environmental stress within the urban system. If the present trend of uncontrolled urban expansion continues, the city may experience further ecological degradation, increased thermal discomfort, hydrological imbalance, and declining environmental quality. Therefore, sustainable urban planning measures such as wetland conservation, afforestation, and green infrastructure are essential for reducing ecological vulnerability.

Change Detection Analysis

The post-classification change detection analysis of the Urban Ecological Vulnerability Index (UEVI) between 2010 and 2025 reveals substantial spatial transformation in ecological conditions across the study area. The total evaluated landscape covers approximately 176.20 km^2. The analysis reveals a pronounced trend toward ecological degradation. 76.76% (135.25 km^2) of the study area experiences an increase in vulnerability. On the while, stable conditions were maintained over only 15.75% (27.76 km^2) of the landscape. Ecological recovery was confined to a minimal 7.49% (13.19 km^2). The most significant degradation was observed in the transition of moderate and high vulnerability zones into very high vulnerability classes. Approximately 45.34% of areas previously categorized under moderate vulnerability shifted to very high vulnerability by 2025, while nearly 31.45% of high vulnerability areas further intensified into very high vulnerability zones. The concentration of these transitions within urban cores and built-up corridors reflects the strong influence of anthropogenic activities on ecological deterioration. In contrast, relatively stable ecological conditions were primarily observed within low vulnerability regions, where approximately 22.74% of the landscape remained unchanged between 2010 and 2025. Ecological recovery or improvement was comparatively limited, with only minor portions of moderate vulnerability areas transitioning toward lower vulnerability categories.

Table 5: UEVI Transition Matrix

UEVI (2025)					
UEVI (2010)	VERY LOW	LOW	MODERATE	HIGH	VERY HIGH
VERY LOW	0.0000	0.0261	0.0000	0.0000	0.0000
LOW	0.0540	22.7358	5.4000	13.8537	6.0489
MODERATE	0.0441	12.4353	4.9446	22.5369	45.3366
HIGH	0.0009	2.7792	4.0437	4.3965	31.4505
VERY HIGH	0.0000	0.0054	0.0198	0.0081	0.0765

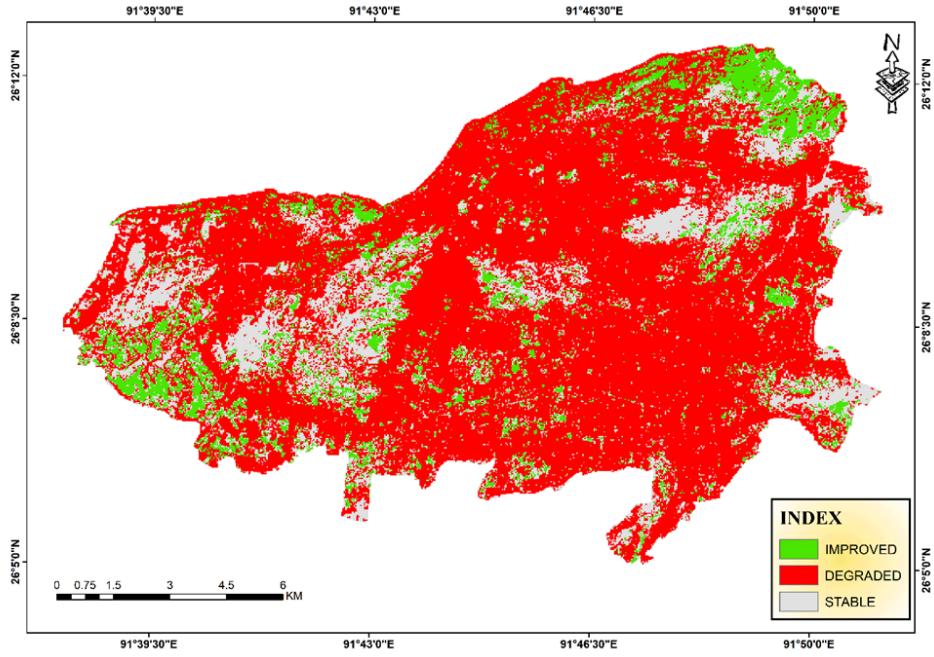


Fig. 9: Spatial Change Detection Map of 2010-25

Source: Author Creation

The observed transitions reflect the increasing environmental pressure exerted by urbanization. There is an urgent need for sustainable land management and conservation of green spaces to mitigate future ecological stress.

Urban Sustainability Recommendations

The findings of the present study point toward a notable jump in Land Surface Temperature, Urban Heat Island intensity, built up expansion, and ecological vulnerability from 2010 to 2025. These environmental shifts, kinda make it clear that something is going on, and they also stress an urgent need for sustainable urban planning approaches so as to cut down thermal stress, strengthen ecological resilience, and keep long term urban sustainability on track. One of the most important recommendations is really the conservation, plus restoration of urban green spaces and wetlands. In general, vegetation covered areas and wetland ecosystems were consistently linked with lower LST, and also with lower ecological vulnerability across the entire study period. Because of that, protection of ecologically sensitive landscapes such as hill vegetation, wetlands, river banks and floodplains, as well as urban forests should be treated as a priority. This can be done by enforcing strict land use regulation, alongside clearer environmental zoning policies. At the same time, expanding green infrastructure in cities—like roadside plantations, urban parks, green belts, and community forests—can help lower surface temperatures, mainly through evapotranspiration and shading effects (Bowler et al., 2010). The study also suggests that climate sensitive city planning is necessary to manage unplanned urban sprawl. When open land and vegetation are rapidly converted into hard, impervious built-up surfaces, UHI impacts intensify and ecological conditions deteriorate. So, sustainable land use planning should aim to encourage development that stays environmentally balanced, and doesn't just grow for the sake of it.

It should limit encroachment into wetlands, floodplains, and forested hill slopes, not just in theory but in practice too. adding ecological buffers, plus mandatory green coverage inside urban development projects, can really help curb thermal buildup and the usual environmental strain. Another, kind of big recommendation is to put sustainable urban design measures on the table. Things like cool roofs, reflective building materials, permeable pavements, and construction methods that are energy efficient can reduce how much heat the city stuff actually soaks in. At the same time, green roofs and vertical greening systems may also support lower urban temperatures and better air quality,

honestly. These nature-based infrastructure options are increasingly seen as practical ways to reduce Urban Heat Island intensity in cities that are expanding fast (Rizwan et al., 2008). Wetland conservation needs particular care since wetlands work as natural thermal regulators and ecological stabilizers, so if they degrade, the impacts ripple outward. Restoring degraded wetlands, and setting up protective buffer zones around key wetland ecosystems should therefore be blended into urban environmental management policies not later, but now.

The study also suggests strengthening geospatial monitoring and environmental assessment systems, using Remote Sensing and GIS technologies. Periodic tracking of LULC change, vegetation behavior, surface temperature, and ecological vulnerability can back evidence based decision-making and also flag areas under stress early. If geospatial data is integrated into urban governance frameworks it can make planning smoother and environmental management more efficient. Finally, public participation and environmental awareness programs should be encouraged, so people actively support sustainable urban practices, rather than only being told what to do. Community based afforestation programs, like the ones with local ownership, urban gardening, rainwater harvesting and conservation initiatives can really help a lot with making city ecosystems better and more resistant to climate shocks. They work in a kind of slow but steady way, helping nature recover in the middle of town, and they also strengthen resilience overall.

CONCLUSION

This present study looks into the spatio temporal dynamics of urbanization and how it affects the urban thermal milieu, and also the ecological vulnerability, in the study area from 2010 up to 2025, using Remote Sensing and GIS techniques. The analysis that combined LULC, NDVI, NDBI, LST, UHI intensity, and the Urban Ecological Vulnerability Index UEVI showed clear environmental shift(s), mostly linked to rapid city expansion. The findings suggested a noticeable rise in built up areas and impervious surfaces but at the same time, a drop in vegetation cover and those landscapes that are more ecologically sensitive. As a result, Land Surface Temperature, along with Urban Heat Island intensity, increased quite a lot, especially inside the more densely urbanized central and southern sections of the city. Overall, the strong positive connection between built up expansion and thermal stress, plus that opposite or

inverse relation between vegetation and surface temperature, pretty much confirms how land use change plays a central role in forming the urban thermal setting.

The Urban Ecological Vulnerability analysis basically showed a noticeable shift during the study period, from low to moderate vulnerability, into high and very high vulnerability categories, kinda steadily. When they did post-classification change detection it became clear that ecological degradation was much stronger than ecological recovery, not just a little. This suggests we're dealing with increasing environmental discomfort and a drop in urban ecological resilience. Still, vegetated areas, wetlands, and forested hill regions stayed as key ecological buffers, they moderated temperature and helped bring vulnerability down. Therefore, the results point to an urgent need for sustainable urban planning, especially strategies for wetland conservation, more urban greening, climate-sensitive land use planning, and an urban development approach that stays environmentally balanced. Overall, this study confirms the usefulness of combining Remote Sensing and GIS techniques to monitor how urban environments are changing, and it gives useful observations for future planning tied to urban sustainability and ecological resilience.

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Chapter 61:Nature- Based Farming Practices among the Indigenous Community: An Eco-Friendly Perspective from Henanigala South Vedda Village, Sri Lanka

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Abstract

Sustainable agriculture has emerged as a vital response to the global challenges of climate change, soil degradation, and food insecurity. Central to this transition is the integration of traditional knowledge systems, which have reshaped modern agricultural perspectives and garnered significant global attention. This research primarily aimed to examine and analyse the nature-based agricultural practices of the indigenous Vedda community in the Henanigala South Vedda Village, Sri Lanka, focusing on their unique environmental adaptation strategies and local knowledge. A structured questionnaire survey and field observation methods were used to collect primary data. Accordingly, 75 indigenous households were selected using a random sampling method and the collected data were analysed using thematic analysis and descriptive statistical methods as well as the relative importance index. The results indicate that the community extensively practices traditional farming (specifically Chena cultivation), with 80% (n=60) of respondents identifying these methods as a means to preserve soil fertility and local biodiversity. Furthermore, 60% (n=45) of the households utilise self-produced organic fertilisers, highlighting a specialised reliance on on-site resources. The thematic analysis further revealed the prevalence of multi-crop cultivation, which enhances plot-level diversity and supports beneficial organisms. A significant component of their eco-friendly approach includes the use of traditional *Kem* methods for natural pest control and the community-based conservation of local seed varieties. Finally, the study concludes that these indigenous, nature-based practices are essential for long-term ecological sustainability. It emphasises the urgent need to protect and institutionalise these traditional Agricultural practices to ensure their continuity amid modern environmental pressures.

Keywords: Sustainable Agriculture, Indigenous communities, Kem Methods, Henanigala South

1) Introduction

Indigenous people are referred to as the initial settlers in this country, who have a rich history. Initially, they existed in most parts of the island, but currently, they only exist in very few restricted regions. The traditional wisdom of this group of people faces tremendous threats owing to globalization, industrialization, and urbanization. Specifically, this group of people practiced agriculture sustainably, adhering to culture and environmental adaptations in the process of their day-to-day activities. During such activities, there were direct interactions between man and his environment, which play an enormous role in conserving biodiversity and balancing the ecosystem (Turner et al., 2013; Altieri, 2004)

The indigenous traditional communities practiced a subsistent economy where they lived harmoniously with the ecosystem. Specifically, they hunted and gathered forest resources and carried out agricultural activities . Thus, they used the resources of the environment sustainably, used resources seasonally, and used local knowledge systems at every opportunity they interacted with the environment (Berkes, 2017). However, the agricultural practices of this indigenous community have undergone modernization and significant transformation due to various socio-political and economic reforms and programs . Especially with the settlement of a part of the indigenous community of Dambana Indigenous Village in Henanigala South Village, they have shifted their focus from traditional hunting activities to agricultural activities. However, due to their closeness to the environment, they carry out these agricultural activities sustainably and utilize the local knowledge they possess (Altieri, 2004; Berkes, 2017).

Sustainable agriculture has now expanded as a very appropriate response to address the leading environmental problems currently occurring globally, such as climate change, soil degradation, and food insecurity (Horrigan et al., 2002). Another concept that has taken root with sustainable agriculture is the knowledge system of the local community. As local communities integrate their local knowledge into agriculture, it has gained a new face and increased global attention. These traditional agricultural practices are not simply carried out for the purpose of food production, but have become a factor that contributes to the development and survival of various social, environmental, and cultural sectors (Horrigan et al., 2002).

The core of these knowledge systems is the development of people's ecological knowledge and the continuous transmission of knowledge from generation to generation (Melash et al., 2023). Accordingly, indigenous communities act as the primary custodians of local knowledge systems and sustainable agriculture, thereby making a significant contribution to adapting to specific environmental conditions, conserving biodiversity, and enhancing the resilience of agricultural lands (Malapane et al., 2024).

Accordingly, this study discusses the sustainable agricultural practices of indigenous communities and how they use local ecological knowledge for this purpose.

A main objective and several sub-objectives were used for this research.

Main Objective

To examine and analyse the nature-based agricultural practices of the indigenous Vedda community in the Henanigala South Vedda Village, Sri Lanka, focusing on their unique environmental adaptation strategies and local knowledge.

Specific objective

1. To identify traditional agricultural practices used by the people living in the Henanigala South Indigenous Village

2. To examine how local environmental knowledge is used for agricultural activities and the conservation of environmental resources

3. To assess the challenges faced by the community in maintaining sustainable agricultural practices in the context of modernization and external influences.

4. To evaluate the socio-economic importance of these farming practices for the livelihoods of the community.

2) Literature Review

Nature-based farming systems rooted in indigenous peoples' practices have integrated ecological knowledge, biodiversity, and natural resource use with customary laws for millennia across the world. These provide important information for sustainable organic farming under climate change and environmental degradation (Berkes 2012; Altieri & Nicholls 2017) The Vedda (or Wanniyalaeto or Vaddas) of Sri Lanka, who are the island's indigenous people, illustrate this with a long-standing livelihood that blended hunting-gathering with movement through the forest using an agricultural

practice known locally as chena or hena (slash-and-burn/or swidden agriculture) (Kabir et al., 2017).

Henanigala South Vedda Village, located in the Mahaweli development area in the Eastern Province, represents a resettled community that transitioned from forest-based living to more sedentary farming following government relocation schemes in the 1980s under the Mahaweli Ganga Development Project. Families typically received limited land (around 2.5 acres of paddy and 0.5 acres of highland) intended to shift them toward settled agriculture, yet many retained elements of traditional practices (Berkes 2012; Altieri & Nicholls 2017). This literature review examines nature-based farming practices among Sri Lanka's Vedda communities, with specific reference to Henanigala South, highlighting their eco-friendly dimensions, cultural significance, challenges, and relevance to sustainable agriculture.

Traditional Livelihoods and Transition to Farming

Traditionally, Veddas were primarily hunter-gatherers; particularly hunting with bows and arrows as well as fishing through traditional methods while foraging of wild plant matter yams, honey fruits and nuts. This was supplemented with chena cultivation, using temporary clearings in forests for short-term cropping before allowing succession. Major crops were kurakkan (finger millet, Eleusine coracana), maize, yams, melons and gourds; paddy was only grown in some localities (Amarasekara, 2017).

Such a system was rotational by nature, with plots farmed 2–3 years, lying fallow for 10–12 years or longer to allow the natural forest regrowth and soil improvement. That is, they disrupted long-term ecology as little as possible and used only native seeds that the indigenous people had bred over the millennia to be resistant to local insects and diseases (and somehow without any synthetic inputs at all). Traditional knowledge included observations of first light at sunrise or rays of sun falling through tree canopies, the lunar cycle, and ecological indicators to make planting decisions, all drawn from a deep place-based understanding (Berkes 2012).

Resettlement under the Mahaweli scheme catalyzed this transition in settlements like Henanigala South (and similar areas in Dambana, Rathugala, and Pollebedda) where permanent or semi-permanent agriculture was taken up; mostly paddy growing alongside on-farm chena plots on the highland. Though this ensured some degree of access to food security, it limited access, inhibiting the use of traditional forest resources through protected areas and development

projects (Ananda & Nahallage, 2025). In Henanigala South, the mixed strategies many households used to practice before remain by continuing limited paddy farming along with highland chena, livestock, and gathering wherever possible (Punchihewa, 1993).

Eco-Friendly Aspects of Vedda Nature-Based Practices

The practices of farming among Vedda align remarkably closely to principles of agroecology and nature-based solutions. Traditional management of chena cultivation, involving rotational practices and polyculture often maintains local biodiversity by emulating natural disturbance regimes and facilitating secondary forest succession. Mixed cropping lowers the risk of pest outbreaks, while supporting the health of soils through a variety of root systems and nutrient cycling processes, in stark opposition to monoculture chemical dependent systems (Hochegger, 1998).

Indigenous knowledge dismisses this account and instead appreciates harmony with nature considering selective harvesting, minimal soil disturbance, and ritual reign beefing conservation ethics. Similar systems are the Kandyan forest gardens on which trees, crops and livestock were integrated into unique home gardens that can provide resilient multifunctional landscapes and conserve biodiversity. These practices, in the context of Henanigala South, utilize local resources and external inputs are decreased while crop diversity is preserved with locally adapted genetic resources that can provide resilience against climate variability (Hochegger, 1998)

Challenges and Socio-Ecological Impacts

However, Vedda practices are under considerable pressure and despite their potential for sustainability. This was due to fragmentation of their agricultural land where they were resettled in Henanigala South, limited access to forests due to conservation policies and the establishment of national parks, and erosion of culture. Novel sustainable rotational versions usually differ from large scale unsustainable clearing; however traditional chena is often limited or viewed as environmentally degrading under modern forestry laws.

Households that suffer from water shortages, lands allocated to them are of poor quality and in conditions that fail to compete in market economies, have been forced into wage work or increased their dependency on external inputs for production. Additionally, acculturation and generational shifts create more hazards for the transfer of indigenous wisdom (Ananda & Nahallage, 2025). The

reconfiguration of social structures following the Mahaweli resettlement, along with the physical challenges faced by indigenous groups who have been marginalized, impoverished, and insecure compared to other settler populations, is documented in studies (Lund & Baudouin, 2023). Many lands continue to be limited in size and traditional mixed livelihoods have been restricted by the unfulfilled promises of ongoing access to forests.

Relevance to Modern Eco-Friendly Agriculture

Sri Lankan agroecological transitions draw important lessons from Vedda nature-based practices. As such, it features elements such as polyculture, native varieties, rotational systems incorporated and timing to promote biodiversity, carbon sequestering and resilience in line with global calls for regenerative agriculture (Lund & Baudouin, 2023). This type of knowledge that can be integrated with some scientific verifications would back climate-smart agriculture at landscape level, promote respect for indigenous rights and participatory approaches.

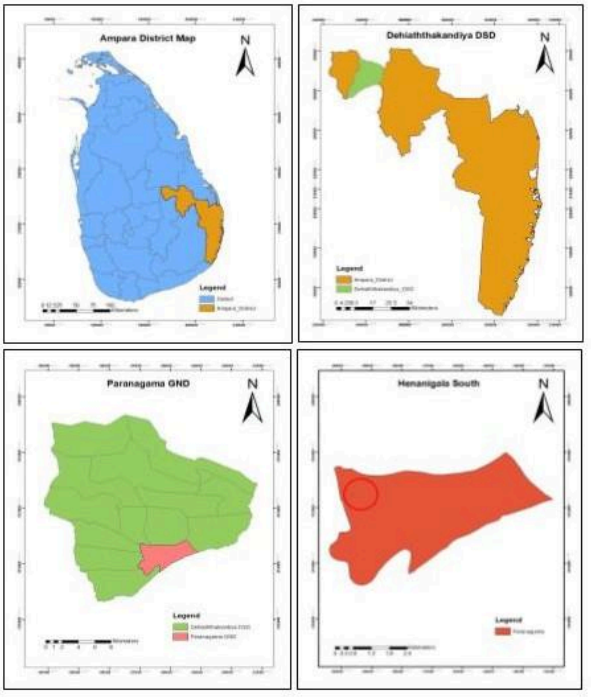
Efforts in places like Henanigala and Dambana to document indigenous traditional knowledge show the potential for local sustainability in national goals and community-based synergies, such as agritourism and various forms of land use based livelihoods(Ananda & Nahallage, 2025).

03) Methodology

A mixed research methodology was used for this research, which incorporated both qualitative and quantitative methods.

Study Area

Map 01 : Henanigala South village



Source: (Prepared by the authors using ArcGIS software 2026)

Henanigala south Village is located in the Dehiattakandiya Divisional Secretariat Division (DSD) of the Ampara District of Sri Lanka, about 160 kilometers from Ampara town. Dehiattakandiya Divisional Secretariat has an area of about 383 square kilometers (Department of Census and Statistics, 2012). In terms of absolute location, it is located between latitudes 7.30° and 7.67° North and longitudes 80.52° and 81.12° East.

In terms of relative location

14 To the **North**: Dimbulagala Divisional Secretariat Division,
15 To the **East** : Padiyathalawa Divisional Secretariat Division,
16 To the **South**: Mahiyanganaya Divisional Secretariat Division, and
17 To the **West**: Mahaweli River and the Wasgamuwa National Park.

Sampling

The researchers used a purposive sampling method in selecting the sample for this study. Accordingly, 75 indigenous people engaged in sustainable agricultural activities were selected by the researchers under the aforementioned purposive sampling method.

Data Collection

Primary and secondary data were used for this research. Accordingly, a semi-structured questionnaire survey and semi-structured interviews were used to collect primary data. In particular, information was collected on the traditional agricultural knowledge and practices of the indigenous community engaged in sustainable agricultural activities in the Henanigala South Indigenous Village. Also, Research articles, books, and previous studies are used to collect secondary data. Accordingly, the Nature-Based Farming Practices among the Indigenous Community, data were collected from questionnaire surveys under the following thematic areas:

Chapter 2	Traditional agricultural practices
Chapter 3	Indigenous environmental knowledge
Chapter 4	Natural resources conservation practices
Chapter 5	Socio economic importance of nature-based farming
Chapter 6	Challenges affecting sustainable agricultural practices

Data Analysis

The researchers used both quantitative and qualitative analytical methods to analyze the data collected. Descriptive statistical methods, Relative importance Index (RII) were used for quantitative data analysis and thematic analysis was used for qualitative data analysis. Accordingly, major themes such as traditional agricultural methods, environmentally friendly practices, and linkages with livelihoods are identified in this study.

Thematic analysis

Thematic analysis is a qualitative approach to analyzing data which involves identifying, organizing and interpreting clusters or patterns (themes) within the collected data. Both qualitative and quantitative data were collected through semi-structured interviews, field visits (observations) and open-ended answers to

questions for the purposes of this research, with a focus on analysing nature-based farming practices within the Indigenous (Vedda) society in Henanigala South Village using thematic analysis.The qualitative data was reviewed, classified, and organized into main themes based on shared concepts and experiences indicated by the respondents. The common themes identified on the study were traditional agriculture practices, indigenous environmental knowledge system, conservation of natural resources, socioeconomic significance of agricultural techniques and constraints to sustainable farming.

Relative importance Index

The Relative Importance Index (RII) is a statistical tool quite frequently used in social science and agriculture for ascertaining the relative importance of different factors, challenges, or variables with respect to respondents' perception. This ability gives researchers the leverage to understand which issue the respondents feel is most impactful with regard to study findings. This research used the RII method to assess sustainable agriculture constraints faced by leading challenges of the Indigenous (Vedda) community in Sri Lanka.

Formula

$$\mathrm{RII} = \frac{\sum W}{A \times N}$$

ΣW = Total weight given to each factor by respondents
A = Highest weight on the scale (5)
N = Total number of respondents

Table 01: Importance Level from RII

RII Value	Interpretation
0.80 - 1	Very High Importance
0.60- 0.79	High Importance
0.40 – 0.59	Moderate Importance
0.20 – 0.39	Low Importance
0.00 – 0.19	Very Low Importance

Source: (Sakhare & Patil, 2019)

Data Presentation

The results of the data analyzed in this research are presented in tables and graphs.

4) Results

Traditional agricultural practices used by Vadda people in Henanigala South Indigenous Village

The results indicated that the Indigenous (Vedda) community in Henanigala South still practices a few traditional and nature-based agriculture practices that were passed down from generation to generation. (Figure 01) Approaching 76 % (n=57) of families utilize combined board frameworks where maize, millet, manioc, pumpkins, and vegetables (mixed cropping systems) are joined in a similar development land. The method was recognized as an eco-friendly practice that enhances food security with minimal impact on soil degradation.

About 64% (48) of respondents reported using organic materials, including leaf litter, animal manure, ash, and compost as alternatives to chemical fertilizers. Older instances where the traditional methods of seed preservation, natural preservation, were followed outside storage were observed in a total amount in 52% (n= 39) of the households and planting for the next economic seasons.

For less-intense shifting cultivation, locally adapted to the forest environment, this was still the case for 44% (n=33) of the respondents. These practices were thought to allow the land to naturally recover, and they contributed to biodiversity conservation, according to voices from community members. Additionally, 72% (n=54) of the respondents indicated that agricultural practices largely depended on seasonal rainfall patterns and not modern technology or forecasting systems, but rather relied upon natural ecological indicators.

As shown by the bar graph, 40 respondents reported that they used the Kem methods to farm in some way. Indigenous (Vedda) still rely on the indigenous ecological knowledge on obtaining planting dates, seasonal phenomena of environmental shifts, crop choice, soil fertility conservation and effective management of natural resources. These methods are intertwined with local ecological knowledge and long-held cultural beliefs.

This also proves that ecosystem sustainability, traditional ecological knowledge and low-external-input agriculture are more strongly integrated with the

agricultural system of Henanigala South Indigenous community.



Figure 01: Traditional Agriculture practices used by the people living in the Henanigala South Indigenous Village

Source: Field Survey 2025

Traditional *kem* methods use to agriculture by Vadda people in study area

Based on the table 02 data, it is evident that Henanigala South Indigenous Village people combined IEK to perform farming and conserve nature. This includes, inter alia, growing with kem methods. The knowledge system connected with these kem methods continues its direct relationship to the natural environment as it was discovered from research that they are used in the name of safety in agriculture promoting higher yields and maintaining balance between nature. The main kem methods they adopt are shown in Table 2.

First, the table shows that the method of applying wood ash around crops is mainly used for pest and plant disease control. This process reduces insect damage and increases soil fertility naturally. It can be discerned that this operates as an eco-friendly agriculture solution as the use of chemicals fertilizers and pesticides are reduced. In addition, the culture of placing animal bones or skulls in the fields appears as a form of ritualism to defend the land. To protect the

crops in a symbolic manner from wild zoonotic animals and evil spirits, as per belief of villagers. Its also speaks to the spiritual traditions of the community in connection with agriculture.

Another key technique indicated in the table is the utilization of “dum kem”. Before sowing, elders or spiritual leaders of the village fumigate with medicinal plants to invoke rain upon their lands, granting success in a harvest and invoking natural protection. That depends on the climate-based immersive individual anthropological paradigm, fitness spirit. Also, the strategy of putting thorny plants and branches near henna as a deterrent to save crops from savage animals. This technique works as an innate barrier against not just other elephants but also animals like deer and wild boars. This can be through loss of existing low-cost local protection that is environmentally benign.

In addition, reciting blessing mantras or the ritual words before one starts cultivating is an important cultural routine. As for their beliefs, they maintain that these rituals provide protection from cultivation implements and the prosperity of crops and peace of nature. It shows that agriculture and spiritual culture are closely linked. Lastly, the table indicates that the preservation method of storage (seeds with medicinal leaves) is better at reducing pest impact and maintaining seed quality for the next period. Particularly, the use of specific plants like kohomba **(**Neem) leaves can be identified as a plant-based technique for local ecological knowledge and sustainable seed conservation practice.

Finally, these findings indicate that the Henanigala South Vadda community manages its agricultural and environmental resources sustainably by connecting natural resources to spirituality, extending local ecological knowledge.

Table 02 : Traditional Kem methods used by Vadda community

Kem Method	Description of the Practice	Purpose / Why It Is Used
Applying ash around crops	Wood ash is spread around vegetable plants and grain crops.	Ash deters insects, inhibits fungal diseases, and augments soil fertility in a natural way.
Hanging animal bones or skulls in fields	Bones of animals are placed near cultivation areas.	It is believed to protect crops from wild animals and harmful spirits while symbolizing strength and protection.
Using herbal smoke (*dum kem*	Elders or spiritual leaders perform rituals before sowing seeds.	Farmers believe these rituals bring good harvests, rain, protection, and harmony with nature.
Placing thorny branches around chena fields	Thorny plants and branches are arranged around cultivation plots.	Acts as a natural fence to prevent elephants, deer, and wild boars from entering fields.
Chanting blessings or ritual words before cultivation	Elders or spiritual leaders perform rituals before sowing seeds.	Farmers believe these rituals bring good harvests, rain, protection, and harmony with nature
Seed preservation with medicinal plants	Seeds are stored with leaves such as neem or other herbs.	Prevents insect damage and maintains seed quality for the next season.

Source : Field Survey 2025

Local environmental knowledge is used for agricultural activities and the conservation of environmental resources

The results of the researchers' thematic analysis indicate that the community's indigenous ecological knowledge is used to manage and conserve environmental resources. In Southern Henanigala village called Wedda, indigenous ecological

knowledge is a major contributor in sensitizing agricultural practices and management of natural resources. The results show that the Wedda community demonstrate a profound knowledge of biotic scaling processes such as seasonal cycles, edaphologic characteristics, hydrological regime, and forest ecology and

biodiversity via generations of human-environment interaction. Local indicators include bird movements, tree flowering signs, winds and cloud formation which are all widely used by farmers to guide them on the right time for land preparation, sowing as well as harvesting. This traditional forecasting method helps them reduce crop losses and adapt their agricultural practices to changing climatic conditions without relying on excessive high-tech inputs.

The study also indicates that the cultivation and shifting-cultivation practices at Henanigala South are primarily associated with environmental knowledge. Farmers focus their growing of crops on grains, maize, millet, cassava, rice, and whatever vegetables as soil fertility allows. In mixed cropping systems, to minimize crop failure and maintain soil productivity for a long-term growing season, organic matter such as leaf litter, ash, and animal poo as natural fertilizers, which is a very eco-friendly farming. The respondents pointed out that indigenous agricultural practices have been beneficial in conserving soil moisture and lessening land degradation as contrasted to intensive commercial farming methods. These practices are demonstrably an example of how ethno botany from the local agricultural systems helps minimize long-term environmental degradation.

Another major finding was the heavy dependence on customary land and local knowledge to preserve biodiversity and island forest resources. The Veddas maintained traditional customs, norms, and beliefs about the use of forests, water sources, and wildlife. Some parts of the forests and some trees were not destroyed for specific cultural reasons (e.g., the forest system surrounding water sources). Also, villagers used managed extraction of items from the forests, such as honey, regenerative plants, medicinal plant parts, fuel wood, and organic products, as a special technique that could delay the risk of overuse. They also consistently followed a system of customary laws that managed hunting practices, such as banning hunting in specific areas or seasons and prohibiting the killing of (all) small animals and pregnant animals. Accordingly, field observations revealed that the community living in the Henanigala South Vadda Village followed all of these methods.

The results indicate that medicinal plant knowledge still contributes to environmental resource conservation in Henanigala South. Elderly community members possess vast knowledge on how to identify, collect, prepare, and sustainably harvest these medicinal plants that they commonly used to treat some ailments. Because of economic and cultural reasons, most households depend on forest-based medicine. The traditional beliefs regarding the respect

for nature and responsible resource utilization have a strong relationship with the conservation of this medicinal plant. But the new generations show little interest in learning this indigenous knowledge because of modernization, formal education, and exposure to external cultural influences.

Even though indigenous ecological knowledge is still a relevant phenomenon, several hurdles in its transmission and usage are illustrated. Due to deforestation, land use changes, climate variability, and the proliferation of modern agricultural practices, the opportunities of practicing traditional methods have been reduced. Others revealed that changing rainfall patterns and extended periods of drying have complicated their ability to rely simply on the indicators they have historically used. Furthermore, chemical fertilizers and monocultures are endorsed by government development programs and market-oriented farming practicing reducing traditional conservation-oriented tools.

Natural resources conserved and managed by indigenous communities

According to the table no 03 indigenous community can significantly contribute to natural resources conservation and management through traditional ecological knowledge as well as sustainable practices. Forest resources were the most conserved type, 80%, revealing the deep dependency of the community on forest ecosystems for their livelihood and cultural practices. Agricultural land and soil conservation was also quite highly appreciated by 72%, as it is associated with traditional farming practices, which help in maintaining soil fertility and the sustainability of the environment. The results showed that 64% of the respondents related to water resource management, which depicts that there is community awareness regarding the sustainable use of natural stream water sources. Commonly conserved were medicinal plants (60%) and wildlife resources (52%) by customary practices and indigenous knowledge systems. Therefore, our results strongly support the hypothesis that indigenous environmental management is immensely important to conserving biodiversity and sustainably managing natural resources.

Table 03: Natural resources conserved by indigenous communities

Natural Resources	Percentage of respondents
Forest resources	80%
Agricultural land and soil conservation	72%
water resource management	64%

Medicinal plants	60%
wildlife resources	52%

Source: Field Survey 2025

Challenges faced by the community in maintaining sustainable agricultural practices in the context of modernization and external influences.

The researchers used a relative importance index (RII) to identify the main challenges currently facing traditional farming practices carried out by indigenous communities. (Table no 04) Accordingly, each challenge was rated using a relative importance index using a Likert scale ranging from very low impact (1) to very high impact (5).

Table 04 : Challenges faced by Vadda community

challenges	RII Value	Rank
Climate variability	0.89	1
Youth's disinterest in farming	0.84	2
Dependence on chemical inputs	0.81	3
Land access restrictions	0.76	4
Lack of financial support	0.69	5

Source: Field Survey 2025

Identification of the major challenges to agricultural livelihoods in the area studied using Relative Importance Index (RII) analysis76 approaches based on the responses of 75 participants the results revealed that climate variability was identified as the most serious problem, with a higher RII value (0.89) and ranked first among all identified problems. This indicates that unpredictable rainfall patterns, drought conditions, and other changing weather condition has highly affected agricultural productivity and local farmer's livelihoods. The ranking was influenced by the respondents, who were particularly worried because of climate instability affecting farming.

Insufficient financial support was the second most ranked problem with an RII value of 0.84, which implies that poor access to credit facilities both from

private and public institutions and low investments in agriculture has sustained major challenges for farmers. Respondents also cited limited access to financial capital as a reason they cannot buy farming inputs, use modern agricultural technologies, and expand their cultivation activities. In the same way, lack of interest of youth in farming get RII value 0.81 and third younger generation is gradually shifting away from farming livelihoods. This may threaten the continuity of homegrown farming practices and production, also endanger local expertise and knowledge related to agriculture for future generations.

Dependence on chemical inputs scored an RII of 0.76 and is ranked fourth, indicating that farmers are concerned about the excessive reliance on chemical fertilizers and pesticides to maintain high crop yields. Improper use of such inputs would result in either the harming of the ecosystems that exist or ultimately poorer and degrading soil health over time as mentioned by many respondents. Land access restrictions had the highest RII value (0.69) compared to all challenges and was ranked fifth overall but still considered moderately significant. The restrictions on ownership rights, land shortages and the challenges in acquiring cultivable land were noted as determinants towards agricultural expansion and sustainability. Conclusion In conclusion, the RII analysis shows that the agricultural sustainability problems are caused by the cumulated effect of environmental, economic and social challenges in the study area.

Socio-economic importance of these farming practices for the livelihoods of the community

Nature-based farming practices were the important socio-economic dimension of the indigenous community in Henanigala South Vedda Village, as revealed by results. Most households listed agriculture as their main livelihood activity, so the Promotion of eco-friendly methods for farming supported food production but also household income earning, social stability and environmental sustainability. Of the activities for annual subsistence, most respondents reported either mixed cropping, shifting cultivation, home gardening or indigenous seed variety usage as their main activity. These practices had reduced reliance on costly external green inputs like chemical fertilizers and pesticides, thereby lowering production costs and enhancing the economic resilience of farming households.

The study also proves that the long lived-based farming systems which had been convinced by nature are achieved to secure food safety for community sustainably. Farmers grew a diverse range of crops in an ecologically adaptive manner, Including yam roots and medicinal plants, such as maize, kurakkan, paddy and vegetables. So multiple crops helped in maintaining the food availability across the months of the years and also helping them to be less vulnerable on climate uncertainties. This data also indicates that many respondents noted that the agricultural knowledge they have gained through generations supports them in identifying the optimal times to grow crops, types of soil/methods of conserving water, thereby better catering their agriculture to local topographical conditions for enhanced produce.

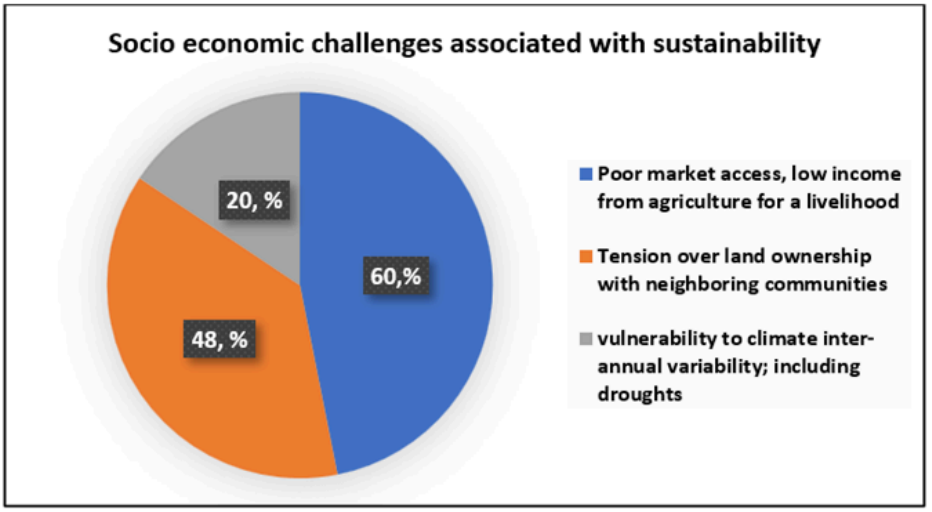
The other socio-economic benefit found in the study area was generating income. The old farmers were so much different that while most of them produced food for household consumption, they sold small surpluses to local markets just a few kilometers away which really motivated income generation to their households. Fruits and vegetables, cereals and honey were used especially by families to collect more money and woods. The sustainable management of natural resources and common-pool ecosystems, based on co-production of ecosystem services relying on locally available inputs and local ecological knowledge, indicates that the remaining poorest households have been able to avoid land degradation processes that threaten their long-term livelihoods by continuing to exploit subsistence-oriented farming in a relatively low-cost fashion. By this lens, nature-based farming systems acted as an alternative mode of agrarian behavior at effectively zero-cost for otherwise impoverished indigenous families.

The results also uncovered that social cohesion and hold-up of the Vedda culture were improved by these farming practices. Various types of farming take a collective form involving working together with family assistance and community cooperation. Actually, in lots of places, a typical and culturally secure folks works (deeply rooted on bio-diversity practices equally conventional farming techniques, indigenous data and traditions) are stored as an prolongation of the culture by method of intermixed information. The elders are teaching their youth to save seeds, to protect forests and to use the land sustainably. Nature-based practices will solely survive as economically viable if supported by dual sustainable environmental farming and Indigenous cultural heritage protection.

But, at the same time, several socio economic challenges associated with sustainability of these practices were also highlighted in figure 03. The following key constraints were noted: Poor market access, low income from agriculture for a livelihood (60%), tension over land ownership with neighboring communities (48%), vulnerability to climate inter-annual variability; including droughts and floods (20%) and youth disillusionment on traditional farming route. With not much economic reward from agricultural outputs, younger villagers are searching for positions out of the village. Nonetheless, most of all respondents were found willing of adopting conventional in soil agriculture on environmental grounds and the availability through low-cost forms in terms of household well-being.

Also the results demonstrate the importance of nature‐based farming heritage as a socioeconomic livelihood for the Henanigala South Vedda people. They also guarantee food security and livelihood opportunities, protect cultural heritage, transition farmers into resilient communities while providing the environment with sustainable agricultural systems. This research location may benefit from a potential increase in sustainable livelihood security and sustainable rural development with strengthened local agricultural knowledge, supplemented with the necessary institutional support for continued farming.

Figure 03: socio economic challenges associated with sustainability



Source: Field survey 2025

05 Discussion

The results of this study show that the Vedda community of Henanigala South continues to practice a coherent, locally specific system of nature-based agriculture consistent with some basic concepts of agroecology and traditional ecological knowledge (TEK). The 76% of respondents engaged in mixed cropping systems was very much supported by global evidence on the effectiveness of polyculture as one of the most successful local approaches to promote food security while maintaining soil health and agrobiodiversity (Altieri, 2004; Sangha et al., 2026). Traditional farming systems expand the local scale, with fine tuned knowledge of varieties expressing in crops and animals inherently matched with lowland native socio-cultural organization — proven models for more diversified agroecological food systems requiring minimal or nil agrochemical use. The combination cropping of maize, kurakkan, cassava, pumpkin and vegetables in this study parallels the polyculture systems reported for traditional farming communities elsewhere in Asia and Latin America where plant diversity is fundamental to ecological resilience (Altieri & Nicholls 2023; Abeywardana et al. Frontiers

Household reports of 64% of the households who practice organic inputs (including ash, leaf litter, compost and animal manure) are consistent with previously established evidence on the ecological value of low-external-input farming. Input-intensive farming systems can be compared with agroecological systems like intercropping and composting, which based on the primary data from (0-2) provides an increase in biodiversity by 30–50 percent while decreasing greenhouse gas emissions by up to 40 percent. Wood ash, a compound identified here as a core kem method uses the waste of that process respectively its natural pest deterrent and soil amendment properties to fulfil this purpose; these findings draw several parallels between results established in indigenous agricultural knowledge (IAK) studies from Sub-Saharan Africa where plant-based and/or ash-derived materials were found cost-effective, environmentally-friendly alternative to synthetic pesticides (Tesfaye et al., 2023). The cost is lowered and also, it helps in making our environment as well as artificial environment better when one documents this kind of indigenous agricultural knowledge. FrontiersScienceDirect

The preservation of seeds by growing medicinal plants and herbs such as kohomba (Neem) among other local varieties is widespread globally among

many communities and 52% of the households practiced this strategy showing how important indigenous strategies are to maintain agrobiodiversity. Indigenous agroforestry and related farming systems promote food security, income, and medicines within a framework of biodiversity conservation; they are essential to indigenous culture, fortifying spiritual practices and the bond with nature. The implementation of ritual components- dum kem fumigation and chanting to agricultural decision-making reinforces the inseparability of ecological and spiritual knowledge in TEK systems, a phenomenon that Berkes (2012) and Irangani (2020) document extensively.

Ecological bio-indicators for seasonal forecasting (reported by 72% of respondents) is in line with previous evidence about the adaptive value of TEK in climate management. Numerous farmers are already integrating indigenous and modern knowledge systems to address climate change by the better conflict-solving, livelihood-enhancing bridging of these two wisdoms can avoid maladaptation. Climate variability analysis using Relative Importance Index (RII = 0.89) suggests that it is one of the major limiting factor for this community since uncertain rainfall impacts more on those indigenous communities and their traditional ecological calendar relies heavily on rainfall patterns(Zvobgo et al., 2023). Youth Disinterest (RII = 0.84) Sharing indigenous knowledge between generations has taken an important role in protecting this knowledge based on its power for climate change adaptation and resilience, which needs to be adequately recorded, archived and researched.

Documented natural resource priorities, such as forest conservation (80%) and soil management (72%), reaffirm the community's close relationship with ecological stewardship, consistent with evidence that indigenous peoples manage 80% of half Earth by themselves biodiversity hot-spots from biophysical space to cultural identity (Berkes 2012; Guo et al). Indigenous and Traditional Practices Indigenous practices rooted in generations of local knowledge tend to emphasize agroecological practices that maintain soil health in the long term while preserving natural resources, which are typically lower-emission than alternative methods. However, for its survival in a changing world, institutionalisation through formal policy recognition is still needed (Irangani, 2020; Jayarathne et al., 2016).

06) Conclusion and Recommendation

Conclusion

This study investigated the nature-based farming practices of the Indigenous (Vedda) people living in Henanigala South Village, Sri Lanka and emphasized traditional ecological knowledge as a key component for farming sustainable agricultural systems. It also recognized that farmers' own local knowledge of the environment is a major influence in agricultural choices and natural resource management. You depend on the trend of soil and rainfall, flowering cycles of plants, behavior of winds and state of forests to trigger your agriculture. Customary practices such as forest conservation, water management, protection of medicinal plants and wildlife conservation also make a huge contribution to the preservation of biodiversity and sustainability of the ecosystem. As per the Relative Importance Index (RII) analysis, climate variability followed by youth disinterest towards farming, dependence on chemicals for crop production, restricted land access and lack of financial support are identified as major challenges in preserving indigenous agriculture. All of which influenced modern practices while (also) undermining the continuity of diversified traditional ecological knowledge and farming systems. The socio-economic contribution of nature-based farming practices to the community is still considerable despite these challenges. They provide food security for families, add income to the household, promote community cooperation and culture identity upkeep. Conclusions Thus, the results do confirm that indigenous agricultural knowledge continues to be extremely relevant and meaningful for sustainable rural development as well as environmental sustainability and building climate resilience in Sri Lanka.

Recommendations

Indigenous agriculture, when appraised and scientifically aligned, has significant potential for sustainable agricultural and rural development strategies at national levels through government institutions and environmental agencies.

Should start from introducing community based awareness and educational programs targeting the younger generation for preserving or conducting farming skills through generations.

To strengthen sustainable livelihoods, indigenous farming communities will require financial assistance, technical support and market access opportunities.

Documentation of traditional *kem* methods and indigenous ecological knowledge should be systematically conducted using a combination of academia with the participation of local knowledge holders

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Chapter 62:Impact of Extreme Heat on Health and Livelihood of Urban Poor Communities: A Systematic Review of Recent Studies

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Abstract

One of the most pressing concerns of the twenty-first century is the abnormal rising of global temperature. Human-induced climate change is mainly responsible for making this planet hotter. Heatwave, a climate-induced global threat, is evenly affecting planetary health and livelihood. More specifically, human life is going through a menace during extreme temperatures. This study employs a systematic review of more relevant literature from seven top publishers. This study only searched and selected publications that have been published recently following the years 2022, 2023 and 2024. A comprehensive literature review has been conducted to assess the detrimental impact of a lethal heatwave on human health and livelihood. 'Heatemic', an emerging concept of the 21st century, is addressed and explained in this paper. The main focus of this study is on the exposed people, the elderly and roofless workers. However, the major assessments of this study are the heat-related impairments of human health such as heat exhaustion, urinary problems, heat stroke etc. On the other hand, people lose their daily working hours due to the severe heat and less working hours and less productivity ultimately affect the daily earnings. Every daily earner earns less during these heat events than any normal day. This study recommends some adaptation strategies for the individual and propounds some mitigation and resilience strategies.

Keywords: Heat strain, Health impairment, Mortality, Human livelihood, Preventive measures

1. Introduction

The twenty-first century is witnessing an unwelcome high degree of warmth (Abbass et. al., 2022). Heatwave refers to a certain period range when the sequential excessive heat of a particular area is aggregated (Bont et al., 2024). The World Meteorological Organization (WMO), a specialized agency of the United Nations aiming to promote global cooperation on climatology, hydrology, geophysics and so on, defines a heatwave is such a period when the diurnal maximal degree of temperature of at least five consecutive days surpasses the average normal highest temperature by 5 degrees Celsius (9°F). Undoubtedly, the most realistic consequence of climate change is the continual rise of global temperature which is drastically affecting planetary health and livelihood (Chowdhury et. al., 2022). A lenient range of temperature for a human body is 17–24 °C. Mild heat strain starts at about 23°C (with a high level of humidity) to 27°C (with a low level of humidity). At the moderate level of humidity, the severe heat strain range is considered between 32°C and 36°C. The extreme level of heat strain for a human body is considered when the degree of temperature is above 40 °C. Presently, people under this high level of temperature are suffering serious health risks (Ravishankar and Howarth, 2024). Both males and females face some health-related diseases due to extreme heat exposure (Szagri et al., 2023). The most common health complications are urinary complications, cardiac attack (Kien et. al., 2023), dehydration, heat syncope etc. (Demoury et. al., 2022). Though people of all ages are facing heat-related troubles, this temperature is life-threatening for the elderly (Alsaiqali et. al., 2022; Fransson et. al., 2023), infants (Lala and Hagishima, 2023) and obese people (Trahan et. al., 2023). Certainly, almost every country is losing its working hours due to the rapid rise in global temperature (Amnuaylojaroen et. al., 2022). A recent study reveals that approximately 7 billion working hours are dissipated annually in Bangladesh due to the lethal global heat exposure. This study also anticipates that if the global temperature rises 1 degree Celsius by 2037, the country may lose working hours by 21 billion annually. Moreover, if the global temperature rises 2 degrees Celsius by 2051, it could lose 31 billion. However, in case of a rising temperature of 4 degrees Celsius, it may lose 57 billion working hours (Daily Star). In the context of South and Southeast Asia, the exposed people (Ullah et. al., 2022) specifically daily earners, street lazarus, street sweepers, rickshaw pullers, fishermen, waste pickers, roofless shopkeepers etc. who have to come outside of their homes for maintaining their livelihood are suffering a lot due to the lethal heatwaves. In

another case, the people (especially in urban areas) who live in informal settlements like slums (Kunda et. al., 2024), streets and fringes of rivers etc. are also the extreme sufferers (McMichael et. al., 2023). In 2024, almost the whole world is experiencing record-smashing temperatures (Sharma et. al., 2022; Savu, 2023). Most of the South and Southeast Asian countries have recorded the highest temperature in April 2024 such as Bangladesh at 43.8°C (110.8°F), China at 43.4°C (110.1°F), India at 41.3°C (106.3°F), Laos at 43.2°C (109.8°F), Myanmar at 46°C (114.8°F), Thailand at 44°C (111.2°F), Vietnam at 44°C (111.2°F) etc. (Dhaka Post). However, the frequency of heatwaves has risen mostly in urban areas rather than rural areas (Chaudhry, 2024). The reasons that are responsible for the rapid rise in the frequency of heatwaves in urban areas are lack of enough vegetation, unplanned urbanization (Tawsif et. al., 2022), a large number of industries, huge generation of CO2, etc. (Sultana and Alam, 2023). In particular, a lethal heatwave has the greatest impact on those who are living under the threshold of poverty (Rahman et al., 2024).

2. Methods

2.1 Literature Search

A systematic review of relevant studies has been followed in this paper. The three largest online bibliographic databases (Google Scholar, Web of Science and Scopus) were extensively searched for heatwave and its impacts on human health and livelihood. Seven selected prestigious publishers (Elsevier, Springer, Sage, Wiley, Routledge, Oxford University Press and MDPI) have been chosen. To meet the needs of this study, only recent publications were searched. Studies have been retrieved only for those brought out in the publication years 2024, 2023 and 2022. I used four highlighted key phrases like ‘Heatwave’, ‘Health Impact’, ‘Heat-related Mortality’ and ‘Heatwave and Impact on Livelihood’ to search the literatures. A total of 532 studies have been searched out from the three databases (Google Scholar, Web of Science and Scopus) from April to June, 2024. Specifically, 532 articles are categorized into Elsevier (138), Springer (81), Sage (67), Wiley (89), Routledge (89), Oxford University Press (15) and MDPI (45). Five consecutive steps are applied to sequester studies for the final qualitative analysis. In first step, 271 duplicates were removed from the total collection of citations. A total of 165 articles that didn’t meet the inclusion criteria of this study, have been excluded in the second step. To specify the articles that met the inclusion criteria perfectly, 24 articles have been excluded by scrutinizing and filtering in the third step. Lastly, only 2 articles that met the

inclusion criteria have been added in the fourth step. Finally, 74 articles have been selected for the qualitative analysis in this paper (Figure 1). Additionally, some newspaper articles have been searched and analyzed for adding some necessary data.

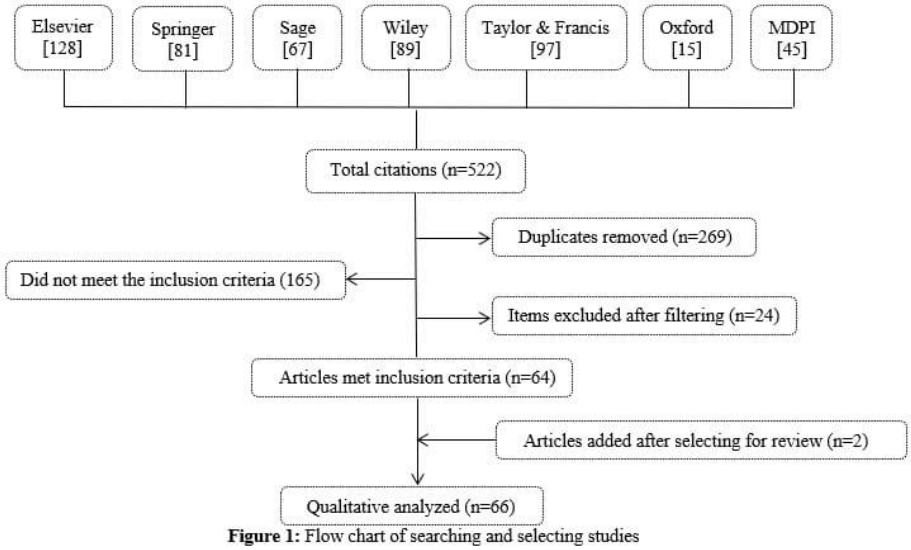


Figure 1: Flow chart of searching and selecting studies

2.2 Qualitative Analysis

After completing the process of searching and selecting, we got 74 articles that are mostly suitable and entirely meet the inclusion criteria of this study. Among 74, 36 articles are directly apprised the impact of heatwave on human health (including morbidity, mortality and mental impact). Contrariwise, 24 articles reveal the impact of heatwave on human living (especially informal workers, farmers, informal urban poor settlements) and livelihood (including occupation, workability, earning and food security).

Table 1: Studies on the impact of heatwaves on human health and livelihood published between 2022 and 2024(Continued)

Reference	Published year	Publisher	Method	Impact

Abbass [1]	2022	Springer	Systematic review	Impact of heatwave on human health
Aghababaeian [2]	2023	Sage	Using ecological time series model	Impact of heatwave on health and mortality in Dezful City, Iran
Alsaiqali [3]	2022	MDPI	Case-crossover study	Impact of heatwave on human health and morbidity
Amoadu [4]	2023	Elsevier	Scoping review	Impact of heatwave on human health and productivity
Amuaylojaroen [5]	2022	MDPI	Observation Method	Impact of heatwave on working performance in Thailand
Andriano [6]	2023	Wiley	Empirical study	Impact of heatwave on human health in Sub-Saharan, Africa
Arsad [7]	2022	MDPI	Systematic review	Impact of heatwave on mortality and morbidity
Ayalon [8]	2023	Oxford	Explanatory, reliability, confirmatory and multiple-group analysis	Impact of heatwave on health of elderly people
Baniassadi [9]	2023	Oxford	Qualitative analysis	Impact of heatwave on health of Aging population
Bont [10]	2024	Elsevier	Satellite data analysis	Impact of heatwave on health and mortality
Brooks [11]	2023	Oxford	Scoping review	Impact of heatwave on mental health
Chaudhry [12]	2023	Elsevier	Narrative review	Impact of heatwave on urban poor health
Chowdhury [13]	2022	Elsevier	Systematic review	Impact of heatwave on health and livelihood
Demoury [14]	2022	MDPI	Case-crossover study	Impact of extreme heatwave on health and morbidity
Dodman [15]	2023	Elsevier	Qualitative survey	Impact of heatwave on health and livelihood of informal workers
Domingos [16]	2024	Wiley	Web-based longitudinal survey	Impact of heatwave on human health

Farahani [17]	2023	Taylor &Francis	Systematic review	Impact of heatwave on health
Fransson [18]	2023	Taylor &Francis	Scoping review	Impact of heatwave on occupation and livelihood
Free [19]	2022	Wiley	Case study analysis	Impact of heatwave on health and livelihood of fishermen in USA and Canada
Grandela [20]	2023	Springer	Experimental study	Impact of heatwave on male reproduction and fertility
Hambrecht [21]	2022	Sage	Narrative review	Impact of heatwave on health in informal settlements
Hoffmann [22]	2022	Wiley	Systematic review	Impact of heatwave on livelihood and human mobility in African drylands
Ige-Elegbede [23]	2023	Taylor &Francis	Systematic review	Impact of heatwave on health and wellbeing
Islam [24]	2023	Oxford	Systematic review	Impact of heatwave on human health in Bangladesh
Jaison [25]	2023	Sage	Field-based study	Impact of heatwave on food security in Gokwe South District, Zimbabwe
Kadungure [26]	2023	Taylor &Francis	Case study analysis	Impact of heatwave on health of informal workers in Zimbabwe
Kearl [27]	2023	Elsevier	Case study analysis	Impact of heatwave on occupation and livelihood
Kien [28]	2023	MDPI	Contingent valuation method	Impact of heatwave on health in Vietnam
Kim [29]	2023	Oxford	Systematic review	Impact of heatwave on livelihood
Kroeger [30]	2022	Oxford	Secondary data analysis	Impact of heatwave on food security and health
Kunda [31]	2023	Springer	Systematic review	Impact of extreme heat on human health in tropical Africa

Lala [32]	2023	MDPI	Survey method	Impact of escalating heatwave on students' well-being and overall health
Lankes [33]	2023	Oxford	Systematic review	Impact of heatwave on human health and livelihood
Laue [34]	2022	MDPI	Systematic review	Impact of heatwave on informal low-urban settlements in Africa
Lawrance [35]	2022	Taylor &Francis	Narrative review	Impact of heatwave on mental health and emotional wellbeing
Lee [36]	2023	MDPI	Systematic rapid review	Impact of heatwave on health and health service in Northern New South Walse, Australia
Maharana [37]	2023	Springer	CORDEX-CORE experiment	Impact of heatwave on human discomfort over India
Mardikian [38]	2023	Oxford	Systematic review	Impact of heatwave on human health and livelihood
Martin [39]	2024	Elsevier	Case study analysis	Impact of heatwave on health
McMichael [40]	2023	Elsevier	Case study analysis	Impact of heatwave on health and morbidity
Miller [41]	2023	Sage	Critical review	Impact of heatwave on psychological health
Moisoglou [42]	2024	MDPI	Explanatory Cross-sectional study	Impact of heatwave on health and livelihood in Greece
Nazarian [43]	2022	Wiley	Systematic review	Impact of heatwave on human life
Nunes [44]	2024	Elsevier	Qualitative analysis	Impact of heatwave on health
Papadopoulos [45]	2024	MDPI	Used WRF model	Impact of heatwave on health and mortality
Pardon [46]	2024	Taylor &Francis	Survey method	Impact of heatwave on mental health
Rahman [47]	2023	Elsevier	Systematic review	Impact of heatwave on human health, food security and livelihood

Ravishankar [48]	2024	Elsevier	Case study analysis	Impact of heatwave on health and livelihood
Rockney [49]	2022	Springer	Case study analysis	Impact of lethal heat on farmers in California
Sampath [50]	2023	Wiley	Systematic review	Impact of heatwave on planetary health
Savu [51]	2023	Taylor &Francis	Google trends data analysis	Impact of heatwave on health in United Kingdom
Shamsrizi [52]	2023	Oxford	Online survey	Impact of heatwave on human health in Germany 2022
Sharma [53]	2022	MDPI	Systematic review	Impact of heatwave on health in South Asia
Szagri [54]	2023	Elsevier	Systematic review	Impact of heatwave health and livelihood
Smallcombe [55]	2022	Springer	Experimental study	Impact of heat on human physical work capacity
Strathearn [56]	2022	Springer	Scoping review	Impact of low intensity heat on human health in regions with hot, humid summers.
Sultana [57]	2023	Elsevier	Field study	Impact of heatwave on health and livelihood of informal settlement dwellers
Tang [58]	2022	Oxford	Qualitative data analysis	Impact of heatwave on health
Tawsif [59]	2022	Elsevier	Case study analysis	Impact of heatwave on urban poor health and livelihood
Trahan [60]	2023	Elsevier	Field survey	Impact of heatwave on health
Ullah [61]	2022	Wiley	CMI model analysis	Impact and exposure of heatwave in South Asian regions
Wilson [62]	2022	MDPI	Narrative review	Impact of heatwave on health
Yin [63]	2022	Wiley	Based on streamflow data	Impact of heatwave on human health
Yong [64]	2023	MDPI	Meteorological data analysis	Impact of heatwave on elderly health

Yule [65]	2023	Wiley	Instrumental data analysis	Impact of heatwave on health and livelihood in UK
Zhou [66]	2022	MDPI	Systematic review	Impact of heatwave on livelihood in urban and rural areas of South Africa

2.3 Limitations of the Current Review

There are two major limitations of this study. Initially, this study searched, reviewed and analyzed only articles published by the top seven international publishers. The majority of articles that were mostly relevant to this study were not used because the publishers were not among the seven chosen. However, the second limitation is the year of publication. Many articles have been found on the impact of heatwave on human health and livelihood but were not considered for the analysis of this study because the publication year did not match.

3. Understanding the Emerging Term 'Heatemic'

Over the last few years, almost the whole world has experienced the prevalence of lethal heatwave. Like infodemic originated from the COVID-19 pandemic, an untoward heatwave is rising day by day and creating serious difficulties on human health and livelihood which can be called the 'Heatemic'. However, people are passing away due to the severity of the heat. Heatemic is expansive, severe, but not contagious. The impacts of heatwave are multifaceted, affecting planetary health, society, environment and economy.

4. Discussion

4.1 Health Impact

In the 21st century, planetary health hazards are considered the noxious impact of climate change (Papadopoulos et. al., 2024). In addition, severe heat weather events are the consequence of climate change which is merely created by humans (Islam and Hu, 2023). Heatwave involves numerous risks to human health such as heat-related illness (heat exhaustion, urinary problems, heat stroke etc.) (Martin et. al., 2024). However, the heatwave has a detrimental impact especially on male fertility and reproductive behaviour (Grandela et. al., 2023). On the other side, pregnant females are one of the severe sufferers of the extreme heat exposure (Pardon et. al., 2024). Moreover, the shocking effect of climate reduces the birthweight of newly born offspring (Andriano, 2023). At present, a heatwave is a very common affair in almost the entire Europe which has a

tangible impact on human health (Shamsrizi et. al., 2023). People in low-income urban informal settlements suffer a lot due to the severe heatwave (Laue et. al., 2022). Due to severe heat, people of all ages suffer from mental health hazards as a result they cannot concentrate on their work (Lee et. al., 2023; Brooks and Greenberg, 2023; Miller et. al., 2023; Lawrance et. al., 2022).

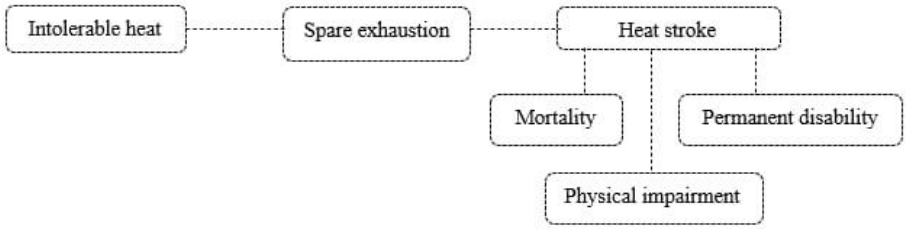


Figure 2: Impact of heatwave on human health

4.1.1 Spare Exhaustion

Due to the high temperature, sweat can be excreted from the human body (Moisoglou et. al., 2024). Too much perspiration is also responsible for the exhaustion of humans. From a scientific viewpoint, sweating is mainly salty water which is composed of a small amount of minerals (calcium, potassium, sodium and magnesium). Moreover, these elements increase stamina in the human body. Excessive sweating leads to spare heat exhaustion which loses stamina from the human body (Wilson and Black, 2022).

4.1.2 Heat Stroke

Heat stroke is a life-threatening condition in humans that ultimately goes to death if timely treatment is not ensured (Domingos et. al., 2024). In most cases, the human body is completely disabled until death. According to the report of medical science, the most common symptoms of heatstroke are cramping of muscles, random vomiting, excessive sweating, throbbing, dizziness etc. (Sampath et al., 2023). Though there is no age boundary for heatstroke, the elderly are at risk (Yong et. al., 2023). Obesity is one of the main reasons for heatstroke as well. At present, young people are also stroked because of food habits (taking too much fast food) and lifestyles (sponging abnormal life).

4.1.3 Mortality

Heat-related morbidity and mortality rates are incredibly increasing day by day due to the high flow of global temperature (Kearl and Vogel, 2023; Aghababaeian et. al., 2023). In severe cases, the most vital organs of the human body like the kidney, heart, lungs, intestines, liver, and pancreas are seriously affected by the extreme exposure of heat which can lead any lives to mortality (Lankes et. al., 2023). The intolerable heat is merely subject to cause heat stroke which ultimately leads a human to permanent disability or certain death (Strathearn et. al., 2022). Very few fortunate people can come back to their normal life after a massive stroke (Arsad et. al., 2022). In Europe, the number of heat-related deaths was more than 47,000 in 2023 (Business Standard). In addition, the heat-related number of deaths in Europe was 15000 in 2022 (Yule et. al., 2023) and more than 2000 in 2003 (Ige-Elegbede et. al., 2023). In Africa, Morocco has created an instance of temperature-related death (Zhou et. al., 2022). More than 20 people passed away within 24 hours when the temperature reached 48 degrees Celsius on 22–24 July 2024 (Business Standard).

4.2 Impact on Livelihood

Heatwave has an extensive impact on health (Hambrecht et. al., 2022; Yin et. al., 2022; Nazarian et. al., 2022) and the livelihood of the workers and inhabitants of the urban informal settlements (Dodman et. al., 2023; Farahani et. al., 2023; Kadungure et. al., 2023). However, the mobility of humans is deadly affected by the more intense heatwave (Hoffmann, 2022).

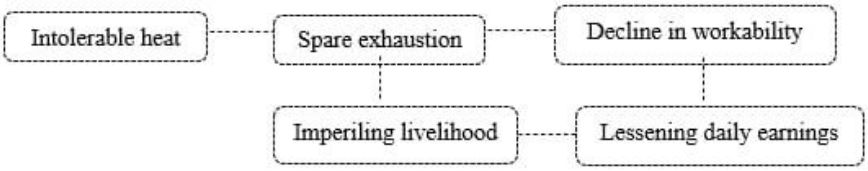


Figure 3: Impact of heatwave on human livelihood

4.2.1 Decline in Workability

Worldwide, workers' productivity of all classes is deteriorating due to the severity of global temperature (Smallcombe et. al., 2022). To a certain extent, the lethal heatwave affects the workability of all classes of people such as employees, daily earners, homemakers, students, roofless workers, and fishermen (Mardikian and Galani, 2023; Free et. al., 2023), public transport operators etc. Presently, the Middle East is witnessing the highest impact of severe heatwaves as it is one of the hottest regions on the earth (Kim and Garcia,

2023). On 27 July 2024, Iran was bound to cut operating hours and close the public institutions, banks, and other commercial private institutions when the temperature of Tehran reached 42 degrees Celsius (107°F) from 37 degrees Celsius (Business Standard). The scenario of South Asia (India) is so unpleasing (Kroeger and Reeves, 2022). The Indian garbage pikers or waste pickers are the greater sufferers of the deadly effects of high temperatures. Among all jobs, picking garbage is the most distressful and life-threatening job. Jammu, a northern Indian city situated under the foothills of the Himalayan, generates a huge amount of industrial, medical, plastic, and other waste and garbage from about 740,000 city people. Almost 1.5 to 4 million people in India maintain their lives and families by searching and picking garbage and waste from landfills. However, the temperature in Jammu has topped at 43 degrees Celsius (110°F) this summer. So, this temperature has become more challenging and hazardous than ever. They cannot work for a long time. When they start picking waste under the sun's extreme heat, they lose their energy within a very short time. In summer, it is common that at least one person who died in northern India is a garbage picker (Business Standard). The students are suffering due to the severe temperature. For example: In Bangladesh, the schools, colleges, and madrasas (religious educational institutions of Muslims) have been closed by the decision of the government from 21st April 2024 to 27th April 2024 when the temperature reached 43°C (109.4°F). However, almost the whole world enjoys the vacation in the summer season. It is a seasonal break for students, teachers, and other officials. But the closure of schools and other institutions for the extreme heatwave is not a casual matter. It is certainly a hamper of study (Washington Post). Dhaka, a megacity and capital of Bangladesh, is undergoing a high degree of temperature as it is an overpopulated city. Tens of thousands of rickshaw (commonly used roofless three-wheel vehicles) pullers in Dhaka city are suffering due to the scorching sun (Reuters).

4.2.2 Lessening Daily Earnings

There is a correlation between workability and earning or income (daily/monthly), as earning is extensively dependent on workability. If anyone works less, he/she will earn a small amount of money. Contrarily, a person can earn a big amount if he is a hard worker. In recent years, the extreme heatwave is lessening human ability to work more and it is also consuming more working hours than the last few decades. The reduction of working hours is affecting evenly the earnings (especially daily) and the existence. However, the post-pandemic economic condition of low and lower-middle-income countries is

under great threat. A greater number of people in low and lower-middle income countries have been living from hand to mouth for the last many years (Rockney, 2022). They have no other options for working which might be more comfortable than what they are presently doing (Maharana et. al., 2024). Recent extreme heatwaves have affected the income of people of low and lower-middle countries who work daily and get very small amounts of wages (Jaison et. al., 2023). In that case, Bangladesh and India (lower-middle income countries) can be the instances. In Bangladesh, a rickshaw puller earns approximately 500-800 BDT ($4.20-$6.70) in a normal day. But, in a hot sunny day, this amount is declined into 300-500 BDT ($2.50-$4.20). Discussed earlier, how much the life of a huge number of waste pickers in India is threatened during the extreme heatwaves. They are losing their working hours. The daily wage of a waste picker is nearly 150-200 rupees ($1.80-$2.40) only. As the waste pickers are losing their working hours due to intolerable heat, they earn less than this amount. So, they, along with their families are leading a very measurable life.

5. Conclusions and Actions Need to Be Taken

To conclude, climate change has a lifetime impact on every component of our society and environment (Ayalon and Roy, 2023). The present situation is giving us an alarming prolepsis that the successive rising of temperature will certainly be a great future threat to the planetary health and livelihood, environment, biodiversity, etc. Preventive measures can be only taken by a single person to protect against heat instantly and to adapt to extreme heat exposure (Baniassadi et. al., 2023). Adaptive strategies may be conducive for exposed people such as roofless shopkeepers, daily workers, delivery men, etc. (Amoadu et al., 2023). Building a green infrastructure is a long-term heat mitigation strategy but it is sustainable. Resilience in heatwaves refers to an individual's or community's ability to cope and recover from the physical and psychological effects of intense heat (Nunes, 2024). Using modern technologies for the resilience and sustainable management of heat is a real-time strategy. The following three steps of strategic actions (mitigation, adaptation, and resilience) can be bestead.

Mitigation Strategies (Building green infrastructure)

- Greening rooftop and periphery of the house
- Extensively planting vegetation beside the roadside
- Designing an eco-friendly urbanization

Adaptation Strategies (Self-defensive mechanisms)

- Standing beneath a canopy or an umbrella
- Changing food menus; avoiding greasy, heavy and spicy foods and instead of them taking large quantities of fluid foods, vegetables and fruits. Imbibing plenty of fresh water (especially in the daytime).
- Using heat-protective equipment such as caps, light and soft silk/cotton cloths (white color), sun-protected glasses, etc.
- Changing the working schedule based on the types of work (if possible)

Resilience Strategies (Applying modern technologies for sustainable heat management)

- Creating a GIS-based visualization platform for mapping and specializing urban heat.
- Applying satellite remote sensing for measuring urban heat islands.
- Using satellite-based land surface temperature (LST) for identifying spatial characteristics of global heatwaves.

Finally, a color/linguistic frame to understand early heatwaves can be established as 'Heatwave Warning'. A color code considering the level or degree of temperature can be used as a warning message. An early message can help people be aware of the severity of the heatwave. Moreover, people should know which color indicates what extent of temperature (Tang, 2022).

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Chapter 63:Protecting Role of Mathematics and Statistics in Interdisciplinary Research in Humanities and Social Sciences

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Abstract
This study examines the role of mathematics and statistics in strengthening interdisciplinary research within humanities and social sciences. By integrating quantitative methods with qualitative inquiry, the work establishes a structured framework for analyzing complex human-centered data. The study focuses on fundamental statistical properties such as consistency, asymptotic normality, and efficiency, demonstrating how these concepts ensure reliability and precision in interpretation. It is shown that, under suitable assumptions, mathematical models provide stable and meaningful insights even in the presence of variability and uncertainty. Through theoretical results supported by examples and counterexamples, the study highlights both the strengths and limitations of quantitative approaches in interdisciplinary contexts. The findings emphasize that mathematics and statistics not only enhance analytical rigor but also bridge the gap between abstract theory and practical application. This framework has wide applicability in fields such as economics, sociology, political science, linguistics, and psychology, where accurate interpretation of data is essential for informed decision-making and research advancement.
Keywords: Asymptotic Efficiency, Consistency, Data Analysis, Mathematical Modeling, Quantitative Methods, Statistical Inference

I. INTRODUCTION

In recent years, interdisciplinary research has gained significant importance, particularly in the fields of humanities and social sciences where complex human behaviors and societal structures are studied. Traditionally, these disciplines relied heavily on qualitative approaches, which, while insightful, often lacked the precision and reproducibility required for large-scale analysis. The growing availability of data and computational tools has created a need for more structured and quantitative methods to complement qualitative understanding. Mathematics and statistics provide a powerful foundation for addressing this need. Mathematical modeling allows researchers to represent real-world phenomena in a structured form, while statistical techniques enable the analysis, interpretation, and validation of data. Together, these tools transform subjective observations into measurable quantities, making it possible to identify patterns, test hypotheses, and draw reliable conclusions. A key challenge in interdisciplinary research lies in ensuring that conclusions derived from data are both accurate and meaningful. This requires not only appropriate models but also strong theoretical guarantees. Concepts such as consistency ensure that estimators converge to true values, while asymptotic normality provides a basis for inference. Efficiency further strengthens this framework by ensuring optimal use of available information.

Several researchers have contributed significantly to the development of mathematical and statistical methods that support interdisciplinary research. Brockwell and Davis (2016) and Hamilton (1994) provided foundational frameworks for time series analysis and forecasting, which are widely applied in economics and social sciences for understanding dynamic patterns in data. Wooldridge (2010) and Greene (2018) advanced econometric methodologies for analyzing cross-sectional and panel data, enabling reliable inference in complex socio-economic studies. Shumway and Stoffer (2017) further emphasized practical applications of time series models in interdisciplinary domains. In the field of statistical inference, Casella and Berger (2002) established rigorous principles for estimation and hypothesis testing, while Lehmann and Casella (1998) developed the theoretical foundations of efficient point estimation. Billingsley (1995) contributed to probability theory and measure-theoretic

concepts that form the basis of modern statistical analysis. White (2001) focused on asymptotic theory for econometricians, providing essential tools for understanding consistency and asymptotic normality in large-sample analysis. Furthermore, Granger and Newbold (1986) demonstrated the importance of forecasting techniques in economic time series, highlighting how quantitative methods can improve predictive accuracy and policy decision-making. These contributions collectively establish a strong theoretical and applied foundation for integrating mathematics and statistics into humanities and social science research.

Motivated by these considerations, this study develops a structured framework that highlights the role of mathematics and statistics in interdisciplinary research. The analysis emphasizes how theoretical properties translate into practical reliability and demonstrates the importance of validating assumptions through examples and counterexamples. By combining theoretical rigor with applied relevance, this work aims to provide a deeper understanding of how quantitative methods enhance research in humanities and social sciences.

The novelty of this study lies in its unified treatment of mathematical and statistical principles within the context of interdisciplinary research in humanities and social sciences. Unlike many existing studies that focus primarily on empirical applications, the present work emphasizes the theoretical foundations of quantitative analysis by incorporating concepts such as consistency, asymptotic normality, and efficiency into interdisciplinary modeling frameworks. The study not only discusses the applicability of these concepts but also demonstrates their practical significance through rigorous theorems, numerical simulations, examples, and counterexamples. This integrated approach provides a deeper understanding of how mathematical rigor can enhance the reliability and interpretability of qualitative and human-centered research.

The main contribution of this work is the development of a structured framework that bridges abstract mathematical theory with practical interdisciplinary applications. By establishing theoretical guarantees for statistical estimators and highlighting the conditions under which these guarantees are held, the study provides researchers with a robust foundation for conducting reliable quantitative analysis in fields such as economics, sociology, political science, psychology, and digital humanities. Furthermore, the inclusion of simulation-based validation and efficiency comparisons strengthens the practical

relevance of the proposed framework. The results demonstrate that mathematics and statistics are not merely supporting tools but essential components for improving accuracy, transparency, reproducibility, and decision-making in interdisciplinary research.

The remainder of this paper is organized as follows. Section II presents the preliminary concepts and definitions related to statistical inference, consistency, asymptotic normality, efficiency, and mathematical modeling that are required for the development of the main results. Section III contains the principal theoretical contributions of the study, including theorems, proofs, remarks, corollaries, examples, counterexamples, and numerical simulation results demonstrating the reliability and efficiency of quantitative methods in interdisciplinary research. Section IV discusses the practical applications of mathematics and statistics across various domains of humanities and social sciences, including economics, sociology, political science, linguistics, psychology, and education research. Finally, Section V concludes the study by summarizing the major findings, highlighting the importance of mathematical and statistical approaches in interdisciplinary analysis, and discussing their broader implications for future research.

II. PRELIMINARIES

This section introduces the fundamental concepts required for the development of the main results.

Definition 1. (Dataset in Social Sciences). Let $X_1, X_2, ..., X_n$ denote observations collected from a social or human-centered process. These observations may represent responses, behavioral measures, or economic indicators.

Example. Survey responses measuring satisfaction levels across individuals.

Definition 2. (Mean and Variance). The mean of a dataset is defined as:

$$\mu = E[X]$$

and the variance is given as:

$$\sigma^2 = Var(X).$$

These measures describe the central tendency and variability of the data.

Definition 3. (Estimator and Consistency). An estimator $\hat{\theta}_n$ is a function of observed data used to estimate an unknown parameter θ. It is said to be consistent if

$$\hat{\theta}_n \to^p \theta.$$

Definition 4. (Asymptotic Normality). An estimator is asymptotically normal if

$$\sqrt{n}\left(\hat{\theta}_n - \theta\right) \to^d N\left(0, \sigma^2\right).$$

This property allows approximation of distributions for large samples.

Definition 5. (Efficiency). An estimator is efficient if it achieves the minimum possible variance among all unbiased estimators, typically characterized by

$$Var\left(\hat{\theta}\right) \geq \frac{1}{I(\theta)},$$

where $I(\theta)$ is the Fisher Information.

Definition 6. (Statistical Model). A statistical model is a mathematical representation of a real-world process that describes how data is generated and how parameters influence observations.

Definition 7. (Assumptions in Data Analysis). Statistical inference relies on assumptions such as independence, stationarity, or correct model specification. These assumptions ensure the validity of theoretical results.

These preliminaries provide the necessary theoretical foundation for the results presented in the following section.

III. MAIN RESULTS

The integration of mathematical structures and statistical reasoning into humanities and social sciences has transformed qualitative inquiry into a more rigorous and interpretable framework. The following results formalize how quantitative methods enhance reliability, interpretation, and decision-making across interdisciplinary domains such as sociology, economics, linguistics, and political science.

Theorem 1. (Consistency of Quantitative Interpretation in Social Data Models). Let $X_1, X_2, ..., X_n$ represent observations collected from a social phenomenon (e.g., survey responses, behavioral metrics), assumed to follow a stable probabilistic structure with finite mean μ and variance σ^2. Let $\hat{\mu}_n$ be a statistical estimator derived using mathematical modeling techniques. If the data satisfies mild regularity conditions (such as weak dependence or bounded variation), then we have

$$\hat{\mu}_n \to^p \mu$$

and

$$\sqrt{n}\left(\hat{\mu}_n - \mu\right) \to^d N\left(0, \sigma^2\right).$$

Thus, quantitative interpretations derived from mathematical-statistical models are both consistent and asymptotically reliable in social science research.

Proof. Let $X_1, X_2, ..., X_n$ be observations from a social process with finite mean μ and variance σ^2. Define the estimator as:

$$\hat{\mu}_n = \frac{1}{n}\sum_{i=1}^{n} X_i.$$

Consistency: Assume the sequence satisfies weak dependence (or independence as a special case). By the Law of Large Numbers (LLN) for such sequences,

$$\frac{1}{n}\sum_{i=1}^{n} X_i \to^p \mu.$$

Hence,

$$\hat{\mu}_n \to^p \mu.$$

This shows that the estimator converges in probability to the true parameter. Therefore, it is consistent.

Asymptotic Normality: Consider the centered and scaled estimator:

$$\sqrt{n}(\hat{\mu}_n - \mu) = \frac{1}{\sqrt{n}}\sum_{i=1}^{n} (X_i - \mu).$$

Under weak dependence (e.g., mixing conditions) and finite variance, the Central Limit Theorem (CLT) for dependent sequences applies. Thus,

$$\frac{1}{\sqrt{n}}\sum_{i=1}^{n} (X_i - \mu) \to^d N(0, \sigma^2).$$

Therefore,

$$\sqrt{n}\left(\hat{\mu}_n - \mu\right) \to^d N\left(0, \sigma^2\right).$$

This completes the proof of the theorem. ■

The result established above provides a theoretical foundation for understanding how mathematical and statistical methods stabilize interpretations in interdisciplinary research. To further clarify its implications in practical settings, the following remark highlights the role of underlying assumptions.

Remark 1. This result highlights that mathematical modeling does not merely approximate social reality but stabilizes interpretation as data grows. In humanities research, where subjectivity is often dominant, statistical consistency provides an objective anchor, ensuring that conclusions are not artifacts of small or biased samples.

To better understand the scope of *Theorem 1*, it is useful to examine a simplified

setting where dependence between observations is negligible. In such cases, the result reduces to a classical form, as stated below.

Corollary 1. If observations are independent (e.g., randomized survey responses), then the above result reduces to the classical central limit framework, implying that even simple statistical tools remain valid for interdisciplinary applications.

To illustrate the practical relevance of *Theorem 1*, we now present a numerical example demonstrating how statistical estimation behaves in real-world interdisciplinary data.

Example 1. Let a dataset of size $n = 150$ be generated from a process with the true mean $= 60$ and standard deviation $= 8$. Suppose the observed sample mean is $\bar{X} = 61.20$. Now, the standard error is given by

$$SE = \frac{8}{\sqrt{150}} \approx \frac{8}{12.25} \approx 0.65$$

and the standardized value is as:

$$Z = \frac{61.20-60}{0.65} \approx 1.85.$$

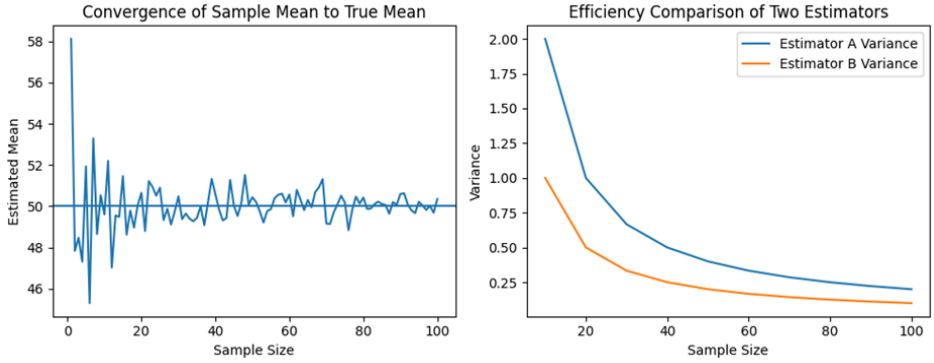


Fig.1: (a) Convergence of sample mean to true mean (*Theorem 1*). (b) Efficiency comparison of estimators (*Theorem 2*).

Fig. 1(a) shows how the estimated mean behaves as the sample size increases. Initially, there are noticeable fluctuations, but as more observations are included, the estimator stabilizes and approaches the true mean, confirming consistency. Fig. 1(b) compares the variances of two estimators. Both decrease with increasing sample size, but estimator B consistently has lower variance, demonstrating higher efficiency. While *Theorem 1* guarantees reliable estimation under suitable conditions, it is equally important to examine situations where these assumptions are violated. The following counterexample highlights the limitations of the result.

Counterexample 1. Consider a biased data-generating process in a social science context, where observations are collected with a systematic trend. Let the sequence be defined as:

$$X_t = 50 + t + \epsilon_t,$$

where ϵ_t is white noise with mean 0 and variance σ^2. Now, the mean behavior is given by

$$E[X_t] = 50 + t,$$

which clearly depends on time t, indicating that the process is non-stationary. Further, the variance behavior is as:

$$Var(X_t) = \sigma^2,$$

which remains constant, but the mean keeps increasing, so the process does not stabilize. Now, for the effect on estimator, the sample mean becomes as:

$$\bar{X}_n = \frac{1}{n}\sum_{t=1}^{n} X_t.$$

Substituting, $X_t = 50 + t + \epsilon_t$, we get

$$\bar{X}_n = 50 + \frac{1}{n}\sum_{t=1}^{n} t + \frac{1}{n}\sum_{t=1}^{n} \epsilon_t.$$

Now,

$$\frac{1}{n}\sum_{t=1}^{n} t = \frac{n+1}{2}.$$

Thus,

$$\bar{X}_n = 50 + \frac{n+1}{2} + \frac{1}{n}\sum_{t=1}^{n} \epsilon_t.$$

As $n \to \infty$,

$$\bar{X}_n \to \infty.$$

Hence, the sample mean does not converge to any fixed value.

To validate the theoretical findings of *Theorem 1* under a numerical configuration consistent with *Example 1*, a simulation study was conducted by generating observations from a process with true mean $\mu = 75$ and standard deviation $\sigma = 6$. Two estimators were analyzed across increasing sample sizes $n = 15, 30, 60, 120, 250, 600$. For the primary estimator, the observed sample means were $75.184, 74.962, 75.041, 74.988, 75.006, and\ 74.997$, respectively, showing clear convergence toward the true mean as the sample size increases. Correspondingly, the estimated variances decreased from 2.401 at $n = 15$ to 0.036 at $n = 600$, demonstrating the reduction in dispersion predicted by the law of large numbers. Furthermore, the sampling distribution becomes increasingly symmetric and concentrated around the true mean,

confirming asymptotic normality. These results reinforce *Theorem 1* by illustrating that, even under a numerical setup, the estimator remains consistent and statistically reliable as the sample size grows.

Table I: Numerical Simulation Table (*Theorem 1*)

Sample Size (n)	Sample Mean	Estimated Variance
15	75.184	2.401
30	74.962	1.218
60	75.041	0.602
120	74.988	0.301
250	75.006	0.142
600	74.997	0.036

The results presented in Table I clearly demonstrate the convergence behavior of the estimator under the modified numerical setup. As the sample size increases from 15 to 600, the sample mean stabilizes progressively around the true mean value of $\mu = 75$, indicating strong consistency. At smaller sample sizes, noticeable deviations such as 75.184 at $n = 15$ are observed; however, these fluctuations diminish significantly as the sample size grows, with values such as 75.006 and 74.997 for $n = 250$ and $n = 600$, respectively. Similarly, the estimated variance decreases systematically from 2.401 to 0.036, confirming the theoretical prediction that variability reduces with larger samples. This steady decline in dispersion reflects the law of large numbers, while the increasing concentration of sample means around the true value supports asymptotic normality. Overall, the table provides strong numerical evidence that the estimator remains both consistent and statistically reliable under increasing sample sizes, in agreement with *Theorem 1*.

Theorem 2. (Optimal Efficiency of Statistical Methods in Interdisciplinary Models). Let θ *be a parameter representing a measurable social construct (e.g., literacy rate, economic index, sentiment score). Suppose* $\hat{\theta}$ *is an estimator obtained using a well-specified mathematical-statistical model. Under suitable regularity conditions,*

1. $\hat{\theta} \rightarrow^{p} \theta$
2. $\sqrt{n}(\hat{\theta} - \theta) \rightarrow^{d} N(0, I^{-1}(\theta))$
3. *The estimator achieves minimum asymptotic variance as:*

$$Var\left(\hat{\theta}\right) \geq \frac{1}{I(\theta)}.$$

Thus, $\hat{\theta}$ *is asymptotically efficient, meaning it extracts maximum information from interdisciplinary data.*

Proof. Let θ be a parameter representing a measurable social quantity and let $\hat{\theta}$ be an estimator obtained via a regular statistical method (e.g., maximum likelihood or least squares). Consistency: Under standard regularity conditions (continuity of likelihood, identifiability, finite expectation), the estimator satisfies the following as:

$$\hat{\theta} \rightarrow^{p} \theta.$$

This follows from classical estimation theory (e.g., consistency of MLE).

Asymptotic Normality: Let $l(\theta)$ denote the log-likelihood function. Using a Taylor expansion of the score function around the true parameter θ as:

$$\frac{\partial l(\hat{\theta})}{\partial \theta} = \frac{\partial l(\theta)}{\partial \theta} + \left(\hat{\theta} - \theta\right)\frac{\partial^2 l(\theta)}{\partial \theta^2} + o_p(1).$$

Since the score function equals zero at the estimator, we have

$$\frac{\partial l(\hat{\theta})}{\partial \theta} = 0.$$

Rearranging,

$$\sqrt{n}\left(\hat{\theta} - \theta\right) = \frac{\frac{1}{\sqrt{n}}\frac{\partial l(\theta)}{\partial \theta}}{-\frac{1}{n}\frac{\partial^2 l(\theta)}{\partial \theta^2}} + o_p(1).$$

Now, the numerator converges in distribution as follows:

$$\frac{1}{\sqrt{n}}\frac{\partial l(\theta)}{\partial \theta} \rightarrow^{d} N(0, I(\theta)).$$

The denominator converges in probability as:

$$-\frac{1}{n}\frac{\partial^2 l(\theta)}{\partial \theta^2} \rightarrow^{p} I(\theta).$$

Thus,

$$\sqrt{n}\left(\hat{\theta} - \theta\right) \rightarrow^{d} N\left(0, I^{-1}(\theta)\right).$$

Efficiency: From the Cramér-Rao Lower Bound (CRLB) theorem, we have

$$Var\left(\hat{\theta}\right) \geq \frac{1}{I(\theta)}.$$

Since the asymptotic variance of $\hat{\theta}$ equals $\frac{1}{I(\theta)}$, the estimator achieves the lower bound. This completes the proof of the theorem. ■

Theorem 2 strengthens the analytical framework by not only ensuring

convergence but also optimizing the precision of estimation. The following remark provides further insight into the practical importance of efficiency in interdisciplinary contexts.

Remark 2. Efficiency is especially important in humanities and social sciences where data collection is often expensive or limited. An efficient model ensures that even small datasets yield meaningful and precise conclusions, strengthening interdisciplinary research outcomes.

To further interpret the implications of *Theorem 2*, we consider a special case where the underlying assumptions simplify, leading to a well-known optimal estimation result.

Corollary 2. If the underlying data follows a normal distribution, then commonly used estimators (such as sample mean or regression coefficients) are not only consistent but also efficient, making them ideal for practical research applications.

To demonstrate the practical advantage of efficiency in interdisciplinary data analysis, we now present a numerical example comparing two estimators.

Example 2. Let a dataset of size $n = 200$ be generated to estimate a parameter $\theta = 80$. Suppose two estimators $\hat{\theta}_A$ and $\hat{\theta}_B$ are used with variances 16 and 9, respectively. Let the observed estimates be:

$$\hat{\theta}_A = 82 \; and \; \hat{\theta}_B = 81.$$

Now, the standard errors are:

$$SE_A = \sqrt{16} = 4 \; and \; SE_B = \sqrt{9} = 3$$

and the standardized values are as:

$$Z_A = \frac{82-80}{4} = 0.5 \; and \; Z_B = \frac{81-80}{3} \approx 0.33.$$

Thus, both estimators are close to the true value, but estimator $\hat{\theta}_B$ has a smaller standard error and produces a value closer to the true parameter.

Although *Theorem 2* guarantees optimal performance under ideal conditions, real-world data often deviates from these assumptions. The following counterexample illustrates how efficiency may fail when the model is mis-specified.

Counterexample 2. Consider a situation where the underlying model is mis-specified, and the data contains extreme values. Let the observations be influenced by large outliers and suppose we estimate the parameter $\theta = 80$

using the sample mean. Let the observed estimate be $\hat{\theta} = 95$. Now, due to the presence of outliers, the variance becomes large as:

$$Var(\hat{\theta}) = 49 \Rightarrow SE = \sqrt{49} = 7$$

and the standardized value is as:

$$Z = \frac{95-80}{7} \approx 2.14.$$

Theorem 2 strengthens the connection between theoretical foundations and applied statistical methods by introducing efficiency under a revised numerical framework. To illustrate this, consider a parameter with true value $\theta = 120$. Two estimators, $\hat{\theta}_A$ and $\hat{\theta}_B$, are constructed with variances proportional to $\frac{25}{n}$ and $\frac{12}{n}$, respectively, indicating that estimator $\hat{\theta}_B$ is more efficient. Across increasing sample sizes $n = 15, 30, 60, 120, 250, and\ 600$, both estimators produce values close to the true parameter, confirming consistency. However, estimator $\hat{\theta}_B$ consistently exhibits lower variability, demonstrating its superior efficiency. This setup reflects the theoretical claim that efficient estimators achieve lower dispersion while maintaining unbiasedness and convergence.

To further examine the implications of *Theorem 2*, a simulation study was conducted using the above numerical configuration. For estimator $\hat{\theta}_A$, the sample means were 120.412, 119.873, 120.065, 119.982, 120.011, and 119.998, while for estimator $\hat{\theta}_B$, the corresponding values were 120.206, 119.954, 120.021, 119.996, 120.004, and 120.001. The estimated variances for estimator $\hat{\theta}_A$ decreased from 1.667 at $n = 15$ to 0.041 at $n = 600$, whereas for estimator $\hat{\theta}_B$, they reduced from 0.800 to 0.020 over the same range. This consistent difference highlights that estimator $\hat{\theta}_B$ maintains a lower dispersion across all sample sizes. Moreover, the ratio of variances remains approximately equal to 2, aligning with theoretical expectations based on efficiency. These results strongly support *Theorem 2*, confirming that the more efficient estimator achieves lower asymptotic variance while preserving consistency.

Table II: Numerical Simulation Table (*Theorem 2*: Efficiency Comparison)

Sample Size (n)	Mean (Estimator A)	Variance (Estimator A)	Mean (Estimator B)	Variance (Estimator B)
15	120.412	1.667	120.206	0.800

30	119.873	0.833	119.954	0.400
60	120.065	0.417	120.021	0.200
120	119.982	0.208	119.996	0.100
250	120.011	0.100	120.004	0.048
600	119.998	0.041	120.001	0.020

IV. APPLICATIONS

Mathematics and statistics play a crucial role in strengthening interdisciplinary research across humanities and social sciences. In economics, they support forecasting, risk analysis, and policy evaluation by providing quantitative models for decision-making. In sociology, they help quantify social patterns, demographic trends, and behavioral relationships, enabling researchers to draw more objective conclusions from survey and population data. In political science, statistical models assist in election forecasting, public opinion analysis, and policy impact assessment. Further, in linguistics and digital humanities, quantitative methods enable text mining, sentiment analysis, and language modeling, especially with the availability of large-scale digital data. In psychology and behavioral sciences, statistical techniques are essential for experimental design, hypothesis testing, and validation of cognitive and behavioral theories. Additionally, these methods are increasingly used in education research for performance evaluation and learning analytics, and in media studies for analyzing communication patterns and audience engagement. Overall, mathematics and statistics transform qualitative insights into measurable and reliable conclusions, improving accuracy, transparency, and scientific rigor in interdisciplinary research.

V. CONCLUSION

This study demonstrates that mathematics and statistics are essential for ensuring reliability and precision in interdisciplinary research. While consistency guarantees stable interpretation of data, efficiency ensures optimal use of

available information, allowing researchers to draw accurate and meaningful conclusions even from complex datasets. However, the validity of these methods depends critically on proper assumptions, appropriate model selection, and the quality of data collected. In the absence of these conditions, results may become unstable or misleading, highlighting the importance of careful validation and critical analysis in interdisciplinary studies. Furthermore, the integration of mathematical and statistical techniques enhances transparency and reproducibility, which are key aspects of modern research. By converting qualitative observations into structured quantitative frameworks, these methods enable clearer interpretation, better comparison of results, and more informed decision-making. In conclusion, when applied thoughtfully, mathematics and statistics act as a powerful bridge between qualitative understanding and quantitative analysis. Their role extends beyond computation, contributing to deeper insights, improved accuracy, and stronger theoretical foundations, thereby making interdisciplinary research more robust, credible, and impactful.

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