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**Struggle and Solidarity in Transforming Urban Futures:
The Fisher Fight for Ennore Wetlands in Tamil Nadu, India**

A thesis
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of
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Abstract

Mainstream academic research on sustainability transformation overwhelmingly sees it as an innovation-centred, top-down, governance-led process playing out within the capitalist system. This research addresses these biases and the neglect of subaltern agency by examining environmental justice struggles as forces of sustainability transformation. It focuses on the ongoing fisher struggle for the tidal wetlands of Ennore in Tamil Nadu, India.

Stretching from the northern edge of Chennai, the Ennore wetlands have been a colonial frontier since the 18th century: first targeted by British empire-building, then by post-independence industrialisation, and later by neoliberal reforms that turned them into an industrial sacrifice zone. Fishers from oppressed castes have resisted this transformation and defended their lifeworlds against dispossession and degradation.

Drawing on my research fieldwork as well as a decade of ethnographic engagement while working alongside the Ennore fishers in their struggle, I theorise how subaltern environmentalisms disrupt both the urban-industrial logics of development and the dominant sustainability paradigms that seek to manage their externalities, and how such disruptions enact material, epistemic, and ontological transformations. The thesis traces the struggle's evolution over five decades from its hyper-local reactive form to a trans-scalar campaign involving legal interventions, coalition-building and cultural and gastro-activism as well as opportunistic campaigns involving more-than-human agents such as the Northeast monsoon and focusing events such as the 2015 Chennai floods.

The study asks:

1. How do subaltern struggles emerge from the margins to challenge hegemonic processes that deny recognition to them and their ways of knowing?
2. How do subaltern struggles for environmental justice contribute to transformative change for sustainability? Phrased differently, what does

sustainability transformation look like when seen from the perspective of subaltern struggles?

From my positionality as activist and researcher, I developed a novel methodological approach—solidarity ethnography—that extends activist ethnography by centring subaltern voices and foregrounding reflexivity. The qualitative study draws on analysis of field notes and interviews, archival work, and collaborative outputs of the Save Ennore Creek Campaign, which was set up by Chennai-based activists, including myself, to mobilise solidarity for the fisher struggle.

Two analytical frameworks guide the study: Medina's (2011) Foucaultian Epistemology of Resistance, which approaches domination and resistance using concepts drawn from Ignorance studies, and a Political Ecology framework of Transformative Resistance that I developed for this research. Together, they reframe domination and resistance as a dynamic of ignorance politics, allowing the analysis to trace how specific forms of ignorance are produced, mobilized, and contested, and how resistance under certain conditions becomes a force for sustainability transformations.

The research reveals the role of ignorance, rather than knowledge, in policy-making and exposes the often uncivil and illiberal nature of civil society and liberal law to present a tentative theory of 'civil' dispossession that targets non-property spaces and their users. By tracing how Ennore's fishers resist, persist, and transform, the thesis demonstrates that subaltern struggles are not merely reactive but generative; they reimagine both sustainability and transformation from the margins. In doing so, the research challenges dominant paradigms of sustainability and insists on a justice-first, present-centred approach to ecological and social futures.

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I thank the many *Aasaans* (teachers, guides and mentors) who have shaped my thinking, opened my world, and helped me discern the battles worth fighting. Over my decades-long work as a journalist and a solidarity worker across Tamil Nadu's coast, countless fishers and elders have guided me to a realisation that science as I know it is merely one way of sensing reality—a provincial, European way—and that in some enlightened knowledge systems science and spirituality are inseparable. Of these *Aasaans*, a few must be named: Palayam Anna and Saru (Saravanan) from Urur Kuppam; Kumaresan, Mahendran, Selvaraj Anna and Srini from Ennore Kattukuppam; and Rajalakshmi from Pazhaverkadu. Their grounded knowledge and deep understanding of the wet littoral spaces they call home and mother informs my thesis as much as the scholars whose rich works I have cited and am indebted to. The second set of *Aasaans* is the most important for a doctoral scholar. Dr. Priya Kurian, my chief supervisor, quietly suggested during my first month that it would be best for all concerned if I dropped the “Prof” and “Dr. Kurian” and just called her Priya. Priya and my second supervisor Dr. Patrick Barrett have been gentle, always available and deeply insightful guides. Our frequent supervisory meetings were occasions that I eagerly awaited, as they were sessions with rich conversations, many laughs and very helpful and specific feedback. With their help, I not only learnt what theories are and do, but also that much of what I had been doing for 30 years as an activist was called “ethnography.” And best of all, I think I may have found a sweet spot for myself in the liminal, porous space straddling activism and academic scholarship.

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Before I shift gears and while still on the topic of a PhD thesis, I must admit the most thankless labour is the verification of in-text citations with the reference list. My young friend, scholar and co-conspirator—Dhruv Gangadharan—jumped in to help, reducing two days of tiresome, boring labour to two fun hours over buttermilk and conversations. Thanks Dhruv. I will return the favour when it is time to review your thesis' reference list.

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Glossary

Adivasi:

Indigenous or “first peoples” of India; literally “original inhabitants.” In Tamil Nadu, often refers to hill and forest-dwelling communities whose customary rights and territories have been repeatedly undermined by state-led development and conservation.

Brahmin:

Member of the priestly caste traditionally associated with ritual purity, learning, and religious authority in Hindu social hierarchy; historically privileged in access to education, power, and land, and positioned at the apex of the caste system.

Caste:

Hereditary social stratification system in South Asia organising labour, ritual status, and endogamy. Caste assigns differential worth and occupation by birth, shaping access to resources, knowledge, and dignity. In Tamil Nadu, caste continues to structure social relations despite legal abolition of “untouchability.”

Dalit:

Literally “broken” or “oppressed”; self-chosen political identity adopted by communities formerly labelled “untouchable.” Denotes resistance to caste oppression and assertion of dignity, equality, and social justice.

Dravidian:

Refers to the family of South Indian languages (including Tamil, Telugu, Kannada, and Malayalam) and to the associated social and political movements in Tamil Nadu that challenge Brahminical dominance and foreground rationalism, linguistic pride, and social justice. The Dravidian movement redefined regional identity and remains central to Tamil politics and cultural self-understanding.

Ennore:

Coastal industrial–fishing region in North Chennai, Tamil Nadu, central to the thesis’s ethnography.

Irular:

An Indigenous Adivasi community of South India (especially Tamil Nadu and Kerala), traditionally forest-dwelling and skilled in hunting, gathering, and tracking, now largely marginalised by displacement and land alienation.

Jenjeri:

Rich fishing ground in the Ennore backwaters, associated with thick deposits of living mud (*Uyir Seru*).

Kazhi:

Tamil word for “flow” or “overflow”; denotes estuarine and tidal landscapes such as *Kadar-kazhi* (sea–river confluence), *Uppan-kazhi* (tidal marsh), and *Kazhi-veli* (floodplain).

Kosasthalaiyar:

Major river system in North Chennai feeding the Ennore Creek and Pulicat Lagoon.

Kuppam:

Tamil term for a coastal fishing village; literally means “settlement” or “hamlet.”

Neer Satyagraham:

Literally “water truth-force”; an embodied protest inspired by Gandhian *satyagraha* (insistence on truth), where fishers stood in polluted waters to assert river rights and ecological justice.

Paadu:

Fisher Tamil word meaning “fishing station” or “designated stretch of river or sea” traditionally used by specific fisher groups or villages under customary tenure systems; access and usage are governed by local norms and mutual understanding among fishers.

Pattinavar:

A dominant sea- and estuarine fishing caste belonging to the coastal stretches of North Tamil Nadu.

Poromboke:

Tamil for “commons” or “unassessed land” belonging to no individual but held in collective use; historically excluded from property regimes.

Pazhaverkadu:

Also known as Pulicat. Coastal lagoon north of Chennai; site of fisherwomen-led ecological and culinary activism.

Seru/Uyir Seru:

Seru means mud or sediment; *Uyir Seru* (“living mud”) denotes fertile, life-bearing river sediment revered by Ennore fishers.

TANGEDCO:

Tamil Nadu Generation and Distribution Corporation, the state-owned electricity utility (appears in local activist discourse).

Tharai:

Literally “floor”; used by fishers to describe sandy, less productive riverbeds.

Uppan-kazhi:

Tidal marsh or saline wetland within the *kazhi* system.

Abbreviations

BJP:	Bharatiya Janata Party
CEA:	Central Electricity Authority
CPP:	Chennai Poromboke Paadal
CRZ:	Coastal Regulation Zone
DMK:	Dravida Munnetra Kazhagam
EAC:	Expert Appraisal Committee
EIA:	Environmental Impact Assessment
EJ:	Environmental Justice
ETPS:	Ennore Thermal Power Station
GOI:	Government of India
GoTN:	Government of Tamil Nadu
Ha:	Hectare
IPBES:	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC:	Intergovernmental Panel on Climate Change
IUCN:	International Union for the Conservation of Nature
KPL:	Kamarajar Port Limited
MoEFCC:	Ministry of Environment, Forest and Climate Change
NGO:	Non-Governmental Organisation
NGT:	National Green Tribunal
PE:	Political Ecology
PETR:	Political Ecology of Transformative Resistance
RTI:	Right to Information (Act)
SCZMA:	State Coastal Zone Management Authority
SECC:	Save Ennore Creek Campaign
TANGEDCO:	Tamil Nadu Generation and Distribution Corporation
TNPCB:	Tamil Nadu Pollution Control Board
UNFCCC:	United Nations Framework Convention on Climate Change
WCED:	World Commission on Environment and Development
WCS:	World Conservation Strategy
WWF:	World Wildlife Fund (renamed World Wide Fund for Nature)

Chapter 1

Introduction

They are very simple people, knowing nothing but fishing and eating. They are being manipulated. (Zonal Inspector General of Police, Tamil Nadu, personal communication, September 2012)

In September 2012, the police brutally crushed a year-long, peaceful agitation by a subaltern¹ fisher community against a nuclear power plant under construction in Koodankulam in southern Tamil Nadu, India. The protest, and the government's heavy-handed response, had attracted global attention (Chemmencheri, 2015). At the time, I was active in the Chennai Solidarity Group for the Koodankulam Struggle, mobilising city-based support while also reporting on the protest as a journalist (Jayaraman, 2012, 2013). In an interview that I did after the crackdown, I asked the zonal police chief for his view on how a campaign by fishers from the margins had gained global attention (Jayaraman, 2016b). His response, quoted above, was dismissive, even contemptuous. To treat his words as merely patronising is to underestimate their ideological function. Such statements operate as discursive weapons drawn from colonial and caste-based toolkits that deny agency to entire communities (Ambedkar, 1968; Fanon, 1965; Spivak, 2023). They also shape how subjugated groups are known—and sometimes come to know themselves—echoing Fanon's account of internalised inferiority and Ambedkar's insight that caste's normative authority fosters a tacit acceptance of violent discrimination. Infantilising or portraying certain 'others' as somehow lacking in qualifications for political participation is a time-tested colonial strategy that reduces subjugated persons to sub-human status and erases their ways of knowing and valuing the world (Mehta, 1990; Smith, 2021). According to the police chief, subaltern subjects

¹ The use of the term subaltern to convey, in a Gramscian sense, the community(ies) of people without access to hegemonic power simplifies reality: even among the subaltern, the levels of non-access are varied, and intersectionalities imposed by caste, race, gender and other identities determine degrees of subjugation, oppression and powerlessness.

are not even capable of autonomous resistance, let alone of citizenship or self-governance.

This exclusion of subaltern subjects from civil society and the public sphere reveals the deeper logics of power at work (Chatterjee, 2006). It also contaminates sustainability discourse, and introduces three biases—an innovation bias, capital agnosticism and a neglect of subaltern resistance and agency (Feola, 2020; Feola et al., 2021)². To Feola’s list, I would add a fourth bias—a futurist bias. This thesis seeks to help close the knowledge gap created by these biases by studying subaltern environmental justice (EJ) struggles as forces of sustainability transformation and sources for defining it. It goes to the heart of the question— “Who will save the world?” —to turn the spotlight away from top-down, governance-led initiatives to subaltern resistance as a driver of transformation.

This study is inspired by the indomitable spirit of subalterns who persist in defending their beleaguered worlds despite centuries of attempted erasure. In my 30-years of solidarity work³ with subaltern EJ struggles, I have seen more biodiversity protected, lands saved, carbon emissions averted, and dignity reclaimed through the struggles of ordinary people than anything done by states, businesses or big NGOs. Yet while elite-led “sustainability fix[es]” (While et al., 2004, p. 549) and consensual policy-making are widely promoted (Swyngedouw, 2010), grassroots struggles against unsustainable and unjust practices are under-researched as drivers of just and sustainable futures (Köhler et al., 2019; Scheidel et al., 2018).

The thesis reflects on my decade-long involvement with a subaltern fisher community’s struggle to defend the Ennore wetlands in Tamil Nadu supplemented by new research on the fishers’ resistance. Over three decades of neoliberal development, the state has transformed these tidal wetlands into industrial real estate and waste sinks (Bremner et al., 2025; Singh et al., 2017). The burden of wetland loss has fallen most heavily on

² The biases are discussed in detail in Section 2.4.

³ By solidarity work, I refer to work by activists who find common cause with subaltern struggles for justice. Such work is carried out alongside, rather than for or on behalf of, marginalised communities to strengthen their struggles by mobilising solidarity for the joint campaigns.

Ennore's artisanal fishers, who already occupy the lowest rungs of India's caste hierarchy.

Despite losses and declining incomes, Ennore's fishers have displayed stamina, strategy, and resilience. They have halted further encroachment, defended their littoral world, and challenged the hegemonic discourse that "industrialisation is good" with their counter-claim that "wetlands are better." In doing so, they have valorised subaltern ways of knowing and articulated alternative visions of development. It is in this context that I introduce the idea of 'amphibious activism': the fluid, adaptive strategies of Ennore fishers as they navigate the binary-defying liminal spaces between land and water, legality and illegality, tradition and modernity to sustain their world and resist erasure.

My research examines subaltern environmentalisms⁴ as under-researched forces of sustainability transformation through the case of the Ennore and Pulicat fishers' struggle for their tidal wetlands. It makes several empirical, theoretical and methodological contributions that are elaborated in Sections 1.7 and 1.8 and develops ground-up conceptualisations of both 'sustainability' and 'transformation'. Where mainstream visions of sustainability transformation often neglect issues of justice and equity (Agyeman & Evans, 2003) and view the future as a problem to be addressed through interventions in the present, subaltern struggles reflect a concern with their oppressive present—of surviving it and, where possible, transforming it. If predatory growth and exploitative social relations define how dominant classes meet their 'present needs,' visions of transformation and sustainability that challenge growth (Xue, 2022) and centre justice and equity in the present are essential (Agyeman & Evans, 2003). Subaltern perspectives and concerns demand a stronger just sustainability (Agyeman, 2010) that expands the present to reveal and repair extant inequities as a precondition for any future (Haraway, 2016b; Santos, 2015)⁵.

⁴ I use subaltern environmentalisms as a blanket term to describe responses by politically and socially marginalised communities to environmental depredations. It includes concepts like environmentalism of the poor, ecological distribution conflicts and environmental justice.

⁵ Haraway urges us to stay and engage with the trouble in the present rather than reduce it to a fleeting moment between a troubled past and an idyllic, utopian future. In this light, blurring the inhumane

By reframing sustainability and transformation through the lens of subaltern environmental justice (EJ) struggles, this thesis challenges dominant understandings. It shows that under the right conditions, such struggles not only improve the socio-political status of marginalised groups—deepening democracy—but also compel states and corporations to confront ecological and social harms. By exposing and resisting the structural roots of domination, subaltern EJ struggles offer a grounded response to today’s twin crises of ecological degradation and inequity.

The emergence, evolution and outcomes of social struggles are heavily influenced by local circumstances and conditions. Having introduced the central concerns and contributions of this study, I now turn to the historical and political-economic contexts within which the struggles that this study examines unfold.

1.1. Development, Dispossession, Resistance: From India to Tamil Nadu

When Mahatma Gandhi warned that the world would be stripped bare if India took to similar economic exploitation as the west, India was a nation of 300 million people (Gandhi, 1963). Today, with 1.43 billion people (Government of India, 2024), it is the world’s most populous country, and its environmental and economic choices are widely seen as globally decisive (Mohanty, 2018).

Gandhi’s concerns were rooted in the devastating impacts of colonial extraction on India’s countryside and people. Between 1765 and 1938, Britain is estimated to have drained wealth worth £9.2 trillion (US\$45 trillion) from India (Patnaik, 2017, p. 278). Between 1880 and 1920 alone, British policies caused 165 million excess deaths—more than the combined toll of both World Wars, including the Holocaust (Sullivan & Hickel, 2023). This extractive logic did not end after independence. The post-independence Indian state retained the model albeit for different ends—to build an industrial base, modernise agriculture and eradicate poverty (Mukherji, 2000).

conditions of everyday subaltern life becomes a deliberate strategy of dominant elite to obscure the collateral damage of mainstream developmentalist agendas.

India's mixed economy⁶ posted only modest growth in the decades following independence in 1947 (Chakraborty, 2018). Yet inequality shrank as the state rolled out welfare programmes despite pressure from the International Monetary Fund to liberalise (Mukherji, 2000). Even this slow-growth, welfarist model imposed heavy costs on vulnerable communities and their environments. Between 21 million and 40 million people were displaced by mines, dams, highways and large industries in four decades of planned development (Fernandes, 2001; Nayak, 2015). Common property lands also shrank dramatically, from 21.6 per cent of India's geographical area in 1980 to 15 per cent three decades later (Malghan et al., 2021).

From the 1990s, neoliberal reforms ushered in a more aggressive economic growth and rising inequality. Neoliberal accumulation through enclosure, commodification, and dispossession (Harvey, 2003) brutalised India's countryside (O'Connor, 1998d, cited in Spence, 2000, p. 68). With more than a quarter of its population directly and solely reliant on the commons for livelihood and sustenance (Foundation for Ecological Security, 2020), such lopsided growth deepened deprivation, making India one of the most unequal countries in the world (Chancel et al., 2022).⁷

As neoliberalism unfolded across the subcontinent, it took on a distinctly Indian flavour, exacerbating inequalities, marginality and deprivation along traditional faultlines of caste and gender (Ahmed, 2009; Das, 2020; Harriss-White, 2003). Unlike the developmentalist era, where land was acquired for public projects, neoliberal reforms turned state governments into land brokers for private capital (Levien, 2018). The redistributive role of the early post-colonial state diminished as the state compromised

⁶ India pursued a statist model of development through import-substituting industrialisation. It is called a mixed economy because of the emphasis on the role of the state in steering capitalist development to ensure a fair share of the fruits of development for India's poor (Kohli, 2010; Nayar, 1989).

⁷ In July 2025, Government of India misquoted the World Bank policy brief to announce that government schemes had propelled India from being an unequal nation to becoming the fourth most equal country in the world. This intentional misinterpretation has been called out by several commentators who have highlighted the relevant section of the policy brief that income inequality had actually worsened between 2004 and 2023. For a discussion on the debate and links to the original policy brief and the Government of India press release, see Kesar, S. (2025, July 6). No, India is not the fourth most equal country. Here's the real data. *The Wire*. <https://thewire.in/economy/india-inequality-pib-fact-check>.

on social security, and labour and environmental protection to facilitate investments. The extractive but welfarist state had been replaced by an exploitative, neoliberal one. Over the past three decades, the neoliberal model has provoked widespread uprisings by peasants, fishers, Dalits⁸, adivasis⁹, and urban minorities. Communities have resisted land acquisition for industries and Special Economic Zones (Jha, 2024; Nielsen & Bedi, 2017), urban and forest evictions (Baviskar, 2003; Sigamany, 2017), coastal land grabs (Jahnavi & Satpathy, 2022) and infrastructure projects (Qiu, 2012).

Shaped by region-specific histories and political cultures, the forms of resistance and neoliberalism have varied across India (Harvey, 2005a). Among Indian states, Tamil Nadu stands out—not only in how neoliberal reforms unfolded but also in how they were contested. Entering the 1990s with a substantial industrial base, developed infrastructure, and an established business class (Kennedy, 2007), the state aggressively acquired large tracts of lands to set up ports, power plants and highways to attract private investment. This expansion conflicted with the state’s earlier policies to reduce spatial disparities arising from centuries of colonial planning (Kennedy, 2007), and sparked intense conflicts with land-losers and landless land-users (Kalaiyarasan & Vijayabaskar, 2021). Described as India’s most politically restive state (Muralidharan, 2017; Narasimhan, 2018), Tamil Nadu provides fertile ground for examining the interplay between state-led development and subaltern environmentalisms.

⁸ Dalit which literally means broken or crushed people refers to the all formerly untouchable castes who fall outside (outcaste) Hindu society’s four-layered hierarchy of people. Even though hierarchy exists within the untouchable castes, the term was coined by activists from the community who used it to unite the oppressed castes and position their collective identity as a militant assertion. The word “pariah” meaning social outcaste is named after the formerly untouchable south Indian community called Paraiyar. After the Indian constitution outlawed untouchability, the Dalit castes were listed under a separate schedule to the constitution and are referred to as Scheduled Castes for the purposes of affirmative action. The lowest castes, including many fishers and peasant communities, are listed under the category Most Backward Classes and are also eligible for affirmative action.

⁹ Adivasi means original inhabitant and refers to the numerous tribal communities that are now listed in a schedule to the Indian constitution. Legally, they are referred to as Scheduled Tribes.

1.2. The Dravidian¹⁰ State

Owing to particular turns in its history, Tamil Nadu has since independence mobilised depressed castes and classes within a broader sub-national Dravidian-Tamil identity that challenged both the Brahmin-led caste hierarchy and north Indian hegemony. Organising around this identity, the state has pursued development through industrialisation-led growth and social justice via redistribution and affirmative action. This approach—now celebrated as the Dravidian model (Kalaiyarasan & Vijayabaskar, 2021)—is distinctive for combining high economic growth with investments in human development, leading some to argue that Tamil Nadu now resembles a developed economy (Kochhar et al., 2006, cited in Kalaiyarasan & Vijayabaskar, 2021).

Poverty reduction, particularly among the depressed castes, has been significant (Kalaiyarasan & Vijayabaskar, 2021). In the two decades following neoliberal reforms, poverty among the Scheduled Castes (Dalits) reduced from 66 per cent to 12.7 per cent (Kalaiyarasan & Vijayabaskar, 2021, p. 19). The Dravidian parties were also committed capitalists, aggressively courting industrial and infrastructure investments. In competing for global capital, the state lowered labour and environmental safeguards and promoted “frontier technologies” (Kalaiyarasan & Vijayabaskar, 2021, p. 225). The burden of the resultant land alienation and ecological degradation fell most heavily upon historically marginalised commons-dependent castes.

Scholars have critiqued Kalaiyarasan and Vijayabaskar’s framing of this model for highlighting its inclusivity but overlooking its exclusions. Heyer (2022), for instance, observes that growth disproportionately benefited non-Brahmin Other Backward Classes, while Dalits gained far less. As my research shows, in Ennore the benefits of

¹⁰ Dravidian is a term used to refer to people belonging to south Indian linguistic groups of Tamil, Malayalam, Kannada and Telugu. These belong to the Dravidian family of languages as distinct from the Indo-Aryan stream.

growth bypassed fishers from the Most Backward Classes,¹¹ Dalits and Adivasi communities who instead bore the costs of dispossession and degradation.

Land dispossession also affected the land-owning Other Backward Classes. However, the neoliberal state—acting as a land-broker for private investors—secured land relatively smoothly, and coaxed owners to yield with relatively little resistance with offers of substantial sums (Vijayabaskar, 2014). By contrast, the landless poor—fishers, peasants, Dalits—posed more intractable resistance. Movements against the enclosure of commons, such as by those opposing Michelin’s Special Economic Zone in Thervoy Kandigai (EJAtlas, 2014j) or Government of India’s Koodankulam nuclear plant project (EJAtlas, 2016c) were quelled using police power.

Kalaiyaran and Vijayabaskar (2021) acknowledge that “Three of the largest state-level protests in recent years have been around issues of ecology and livelihood” (p. 228). However, they do not probe their significance, a lapse that conceals the Dravidian model’s fault lines. Even as it projected a commitment to social justice, the state simultaneously entrenched neoliberal capitalism premised on dispossession and exclusion, provoking widespread protests. Indeed, EJ struggles in Tamil Nadu over the past three decades—against polluting industries, ports, airports, expressways, power plants and industrial zones—have often snowballed into massive state-wide mobilisations. These uprisings have shaped electoral agendas, influenced political narratives, and even yielded concrete policy outcomes, such as the state government’s decision to ban new hydrocarbon projects in the Cauvery delta (Government of Tamil Nadu, 2020b). Tamil Nadu thus offers a paradoxical context: a polity that claims a historical commitment to equality and social justice, yet relentlessly advances a neoliberal project of alienation and dispossession. It is within this tension that subaltern EJ confrontations with the state present possibilities of transformative change.

¹¹ Most Backward Classes refers to caste groups within Tamil Nadu government’s system of social classification who are more marginalised and economically vulnerable than the Other Backward Classes, which includes the non-Brahmin elite. Only the outcaste groups – Scheduled Castes (Dalits) and Tribes (Adivasis) – are below the MBCs in the hierarchy. This classification is used by the government for affirmative action.

1.3. Ennore: Then. . .

Located on the northern edge of Tamil Nadu's capital, Chennai, Ennore¹² refers both to the region and to the sprawling tidal wetlands at the confluence of the city's largest river—the Kosasthalaiyar—with the Bay of Bengal. These wetlands and the Kattupalli barrier island that separates them from the sea host a mosaic of habitats: sand dunes, tropical dry evergreen thickets, rice paddies, salt marshes, oyster beds, mangroves, islets and freshwater ponds. This ecological richness sustains livelihoods ranging from fishing and shell gathering to salt panning, farming, and livestock grazing.

Life in this watery landscape revolves around the commons and the productive fringes of the tidal waterbody. As in society, creative forces and life itself thrives in the margins, not the mainstream. Here, seasons, tides, fecundity and time are measured in shifting cycles of salinity and wetness. In the summer, the salt marshes are a desiccated cake of white-spotted brown, while the nearby salt pans glare under the noon sun. In December, after the retreat of the northeast monsoon, water marks its territory spreading across the landscape. The wetlands teem with life in the months that follow as tens of thousands of waterfowl share the bounty with the fishers from surrounding villages.

As the dry season advances and waters recede, a venous network of streams criss-crossing the wetlands and their margins emerges; each stream with its own name—Maan Kalvai, Jamarangal, Bothakal, Bridgetharai, Kottamunai, Thodapakuchi, Kuruvimedu and so on. Stretching across the backwaters from Vellaianman Thittu, an islet occupied by Kattukuppam's guardian deities, the Kuruvimedu Kalvai (Sparrow Hill Canal) was once a major artery for salt barges linking the colonial government's Vallur salt factory with Madras (now Chennai). This mangrove-fringed stream—famed for its prawns, palm-sized river crabs and all varieties of fish—still evokes nostalgia among older fishers from Kattukuppam and Sivanpadaiveethi.

¹² The Ennore wetlands occupy a far larger area than the inhabited namesake on the eastern fringes of the wetlands which comprise six fishing villages – Sivanpadaiveethikuppam, Kattukuppam, Mugatwarakuppam, Ennorekuppam, Thazhankuppam and Nettukuppam – and numerous non-fisher hamlets. The salt pans and farm lands lie to the west of the Ennore wetlands.

The intimate geography of these wetlands—canals, sediments, deities, and harvests—reveals how deeply livelihoods and landscapes intertwine. This sense of place is captured in the *People’s Plan for Eco-restoration of Ennore Wetlands*, co-produced by fishers and activists:

What may appear to an uninformed eye as a beautiful waterscape, or mounds of sand or the vast nothingness of an ocean actually hides multiple layers of stories and beliefs that tie local people to their water-lands. In Thazhankuppam, a village named after the *Thazan* (screwpine) plant, the elders speak of Sembada Thaatha, a fierce grandfatherly apparition, with love and awe. Thaatha (Tamil for grandfather) haunts the nearshore waters off the estuary, and has been seen by many striding on the water with a glowing cigar clutched between his fingers.

Fishers pray to Sembada Thaatha for safe passage across the surf. (Jayaraman et al., 2024)

Sembada Thaatha is said to guard the *Tharai Kadal* (shallow sea), a treacherous surf zone where submerged sandbars stretch for kilometres parallel to the shore (See Figure 1). On colonial and present-day bathymetric maps, this zone appears as the Ennore shoals. For fishers, these waters embody both risk and protection—inseparable from the stories, spirits, and practices that bind them to place.

These stories of sediments and spirits are not offered here as nostalgia. Rather they are essential context to understand how local fishers view the transformation wrought by state interventions in the region. They are a reminder that Ennore is more than land and water and that what is at stake is a lived world whose meanings and memories will shape how struggles unfold in the chapters that follow.

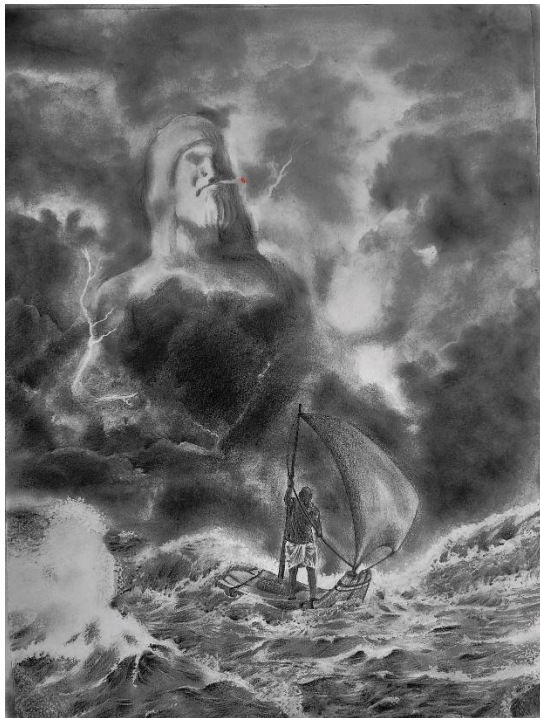
1.4. . . .And Now

Ennore has had an unbroken history as a colonial frontier since the late 18th century, during which it has survived successive waves of wetland enclosures, and toxic pollution. The first wave spanning the British colonial era saw the conversion of thousands of acres of the wetlands into commercial salt pans to fund the empire’s Indian operations (Government of India, 1901). The second wave, in the post-

independence period (1947 to the 1980s) ushered in fossil-fuel-based industries—coal-fired thermal power plants, an oil refinery and petrochemical industries—promoted by a developmentalist state invested in poverty alleviation and industrial and agricultural self-sufficiency (Kohli, 2010).

Figure 1

An artistic rendition of Sembada Thaatha.



Note. Copyright 2024 by Elavarasan. Reprinted with permission. (Jayaraman et al., 2024)

The birth of the neoliberal era in 1991 marked a third wave of internal colonisation where Ennore's land-waterscapes were power plants, ports and related infrastructure. By their very nature of facilitating the movement of materials between hinterland and distant locations, ports enslave their immediate surroundings and subordinate them to the logistical imperatives of capital circulation and accumulation (Arboleda, 2020).

The wetlands today bear little resemblance to the vibrant water-landscapes described in the *People's Plan* (Jayaraman et al., 2024). What was once a dynamic tidal commons has been steadily transformed into an industrial corridor serving Chennai and beyond. Over the three waves of colonisation, successive states have recast Ennore's estuaries,

creeks, and backwaters as wastelands and converted them into sites for ports, thermal power plants, coal yards, and petrochemical complexes (Jayaraman et al., 2025).

This industrialisation has fundamentally altered local ecologies. The living sediment of the tidal creeks is now choked with fly ash, sewage and industrial sludge, and construction debris (Joint Expert Committee, 2022). Canals remembered for prawns and crabs are silted or blocked (Jayaraman & Kumar, 2017). The pleasant experience of fishing has been replaced by a sensory nightmare of wading through sewage from the city and hot water from the power plants. Wetlands that once absorbed floodwaters have lost their ability to drain and protect the hinterlands; encroached and landfilled, they have been rendered prone to inundation during monsoons (Jayaraman, 2016a).

For Ennore-Pulicat's fishing villages, these transformations have meant dispossession on multiple fronts. Traditional fishing grounds have been lost or degraded due to dredging, industrial installations and pollution (Joint Expert Committee, 2022). Fish catches and fishing incomes have fallen due to polluted water and smothered sediment. Respiratory and skin ailments have become commonplace because of air pollution and toxic effluents (Kumar et al., 2021). Families that once lived off the abundance of river and sea now struggle with shrinking incomes and debt (Singh et al., 2017). From abundance to degradation, Ennore's transformation exposes state-led development as not only a material process but also an epistemic one that seeks to overwrite fisher knowledge with techno-capitalist visions of progress.

Yet alongside loss and degradation, resistance has persisted. Ennore's artisanal fishers¹³ have challenged each new encroachment through petitions, court cases, street protests, and creative acts of political theatre. Their campaigns have reframed the wetlands, that were being portrayed as wastelands, as living systems vital to the livelihoods of fishers, a host of non-human life and to the wider city. In this effort, they opportunistically seized on the agency of more-than-human agents turning the devastating urban floods caused by the Northeast monsoons in 2015 as a phenomenon

¹³ Listed in the order of numerical strength and political agency, Ennore's wetland fishers come from the Pattinavar, Parvatharajakulam, Dalits (Scheduled Castes) and Irular (Scheduled Tribe) castes. Pattinavar and Parvatharajakulam castes are categorised as Most Backward Classes by the Government of Tamil Nadu for the purposes of targeting affirmative action.

that linked fisher well-being to that of the city. Their campaigns made Ennore nationally visible and positioned it discursively as a critical case study of urban malaise, capitalism and casteism.

The campaign has won significant legal victories, physically prevented diversion of more than 1000 acres of wetlands, and halted several ecologically harmful industrial and infrastructure projects. Equally importantly, it has strengthened the resolve of the fishers, elevated their social status and that of women within the community, and brought non-fishers to engage alongside the fishers in the battle to save the wetlands. The struggle over Ennore thus encapsulates the overarching question of this thesis: How do marginalised communities resist erasure, reclaim their environment, and bring about sustainability transformations by articulating alternative visions of both present and future?

While this thesis is situated within an urbanising landscape at the margins of Chennai, it does not treat “the urban” as a stable or bounded category. Rather than beginning with the city as a given analytical unit, it approaches Ennore as a littoral space through which urban-industrial logics are enacted, contested and reworked to produce amphibious socio-natures. The urban thus appears not as a pre-defined condition but as an uneven – and often imposed and always negotiated – process of socio-spatial transformation. This perspective aligns with urban political ecology in its attention to power, metabolism, and socio-natures, extending it by foregrounding littorality, subaltern struggles, and more-than-human agencies as constitutive forces in the production of the urban. It also engages planetary urbanisation approaches in treating urbanisation as a process, while resisting tendencies to universalise urbanisation and flatten spatial difference by insisting on the specificity of littoral environments and struggles (Robinson, 2011; Robinson & Roy, 2016).

This reframing of Ennore as a littoral, processual space under conditions of urbanisation shapes the questions that structure this study. Specifically, this research will address the following questions and sub-questions:

1. How do subaltern struggles emerge from the margins to challenge hegemonic processes that deny recognition to them and their ways of knowing?

- a. What are the enabling factors, including actors, actions, circumstances, and strategies that allowed the Ennore fishers to emerge, persist and rearrange power relations and reverse policy?
2. How do subaltern struggles for environmental justice contribute to transformative change for sustainability? Phrased differently, what does sustainability transformation look like when seen from the perspective of subaltern struggles?

An exploration prompted by these questions will reveal insights into the dynamics of transformative resistance and spotlight the neglected role of subaltern environmentalisms in ushering in sustainability transformations. In doing so, the insights from this study can also point to ways out of the dead-end confronting mainstream sustainability interventions.

1.5. Concepts and Frameworks

Taking a critical approach to research, this study adopts the epistemological stance that knowledge and its counterpart, ignorance, are political and shaped by the interplay of ideology, power and history. It draws from ignorance studies with genealogical strands rooted in feminist standpoint theory (Haraway, 1988; Harding, 2006; Tuana & Sullivan, 2006), critical race theory (Mills, 2007) and critical sociology of knowledge (McGoey, 2012). Each of the three theorises ignorance as a situated and politically productive force. Haraway exposes the illusion of objective knowledge by referring to its situatedness and ignorance of positionality (Haraway, 1988). Writing on white ignorance, Mills (2007) examines how white supremacy is sustained by actively producing and mobilising ignorance that poses “unblushingly as knowledge” (p. 13). Shifting from Haraway and Mills’ identity standpoints, McGoey examines ignorance as an instrument of rational power in organisational and bureaucratic settings (McGoey, 2007, 2012, 2021). Taken together, all three conceptualisations position ignorance both as a technology of rule and a potential site of resistance.

This study uses Medina’s (2011) ignorance-based Foucaultian epistemology of resistance as a framework to understand how Ennore’s fishers survived, resisted and

thwarted erasure and contested the degradation of the wetlands. Medina builds on Foucault's insight that knowledge and power are internally related and that resistance emerges from within power, not outside it. Interrogating practices of remembering and forgetting in the context of power struggles reveals the processes by which certain knowledges and memories are legitimised, while others are erased, deformed or subjugated. Medina calls for insurrections of subjugated knowledges, or acts of "remembering against the grain" (p. 12) that expose the silences and exclusions shaping official histories. By tracing how counter-memories and counter-histories surface through epistemic friction, Medina proposes what he terms *guerrilla pluralism*: a radical commitment to sustaining contestation among heterogeneous knowledges rather than reconciling them into a unified narrative. This framework illuminates how subaltern actors, scholars and activists can mobilise forgotten or dismissed knowledges to reopen epistemic battles and make visible what dominant epistemologies render invisible. In this study, Medina's approach informs my analysis of how fishers' embodied practices resurrect and circulate their experiences, knowledges and memories—that were ignored by official narratives—as acts of resistance against state-sponsored erasures.

I examine the attempted erasures and the resistance to such acts as a playing out of a Lefebvrian socio-spatial politics (Lefebvre, 2003a). Lefebvre (1991) conceives of space not as a neutral or static given but as continually produced and un-made through social practices, representations and embodied practices. He theorises state-space relations as operating across physical (national territory transformed by infrastructures facilitating flows of capital, resources and labour), social (hierarchically ordered institutions) and mental (how people imagine the state) spaces. What is ignored, as much as what is known, is central to how states produce abstract spaces that strip places of their particularities and render them governable. Resistance, then, is deeply spatial as it is about reinserting the ignored particularities and asserting the right to define space.

While a spatially-grounded epistemology of resistance works to analyse the dynamics of subaltern emergence, studying the transformative outcomes of resistance requires a different tool. In this research, I refer to a four-pronged political ecology framework of

climate mitigation (Sovacool, 2021) to develop a political ecology framework of transformative resistance (PETR). Where Sovacool's model addressed the political ecology of elite climate action to highlight its dispossessive tendencies, PETR's focus is on subaltern resistance and its emancipatory characteristics. Drawing on concepts from urban theory (Butler, 2012; Lefebvre, 1991, 2003a), political ecology (Dunlap, 2020) and studies of subaltern resistance (Chandra & Nielsen, 2015), PETR studies transformation along four processual axes—namely, enduring (surviving the present), commoning (modifying the present by defying enclosures), opening up or insurgent occupation (occupying discursive decision-making spaces) and re-energising (restoring well-being).

1.6. Methods and Methodology

As it seeks to describe, understand and explain the dynamics of subjugation and resistance, this research is designed as a case study of the Ennore-Pulicat fishers' struggle. Case studies are best suited to answer “how” and “why” questions in investigating contemporary phenomena (Yin, 2014) where the researcher has limited control over events.

My positionality—as an academic researcher with a long history of solidarity work in Ennore—is central to the methodological choices of this study. Over twelve years of co-strategising and joint action with fisher communities gave me unique access to the field and to forms of knowing that would have remained closed to an outsider. At the same time, it demanded reflexivity, restraint, and the ability to navigate overlapping identities. As an activist-researcher, my work was oriented toward immediate campaign goals; as a researcher-activist now, my engagement became more open-ended, guided by my research questions and broader lines of inquiry.

This shift led me to draw on activist ethnography, understood as a situated engagement with emancipatory movements that positions the researcher within the field to resist reproducing colonial hierarchies (Deschner & Dorion, 2020). However, rather than position myself within the field, I was already in the field but engaging with it anew in my role as a researcher-activist. Drawing on this positionality, I build on activist ethnography to develop and deploy what I term solidarity ethnography as the

methodological approach for this study. Solidarity ethnography extends activist ethnography's commitments to participation and reflexivity by foregrounding restraint, and mutual accountability as generative modes of knowledge production.

It draws on the three principles of solidarity—deep, humble and slow solidarity—developed over three decades of solidarity activism and the work of Indigenous scholars (Smith, 2005; Smith, 2021), and insists on:

- an embeddedness in struggle: I was not a detached researcher or even a new participant observer in the Ennore campaign. The field research was a continuation of my prior ethnographic engagement as an activist researcher co-producing knowledge and strategy with the fishers.
- a political stance that centres solidarity in activism and research. It entails taking sides, acknowledging inequality and power imbalances, and aligning research with the interests of subaltern groups all the while maintaining a vigilant reflexivity with one's own positionality.

This approach generates insights unavailable to detached and even participant observation as it is built on a bed of deep and involved solidarity. It reveals how strategies are debated within social struggles, and how solidarities are maintained and strengthened across difference. At the same time, it raises ethical questions about representation, co-authorship, and the researcher's accountability. These questions are dealt with in later chapters.

In addition to field observations, this study draws on campaign publications, including audiovisual material, interviews and conversations with participants, archival documents, co-produced outputs, news media content, and official documents including project reports, Environmental Impact Assessments reports, court orders and other records obtained using the Right to Information Act, 2005.

1.7. Contributions

This research makes contributions on three fronts: empirical, theoretical and methodological. Empirically, this research provides one of the first sustained studies of the Ennore fishers' struggle to defend their wetlands and adds to the scant literature on

subaltern resistance as a force of sustainability transformation (Temper et al., 2020; Temper, Walter, et al., 2018). It documents how subaltern actors resist material dispossession and epistemic erasure and conceptualises their actions as insurrections informed by the fluid liminality of the water-landscapes they inhabit and the more-than-human agents active within them. Theoretically, it extends political ecology in three ways. First, it offers a political ecology framework of transformative resistance to study the emancipatory tendencies of grassroots struggles; second, it proposes ‘civil’ dispossession as a conceptual category to understand the uncivil and illiberal nature of civil society and liberal law in facilitating dispossession and enclosure of commons. Third, it contributes to the emerging scholarship on political ecology using ignorance as a lens on power (Birkenholtz & Simon, 2022). Methodologically, it deepens activist ethnography by offering solidarity ethnography as an approach which demands a critical and reflexive positioning of the researcher-activist in the study.

1.8. Thesis Structure

This thesis is organised into nine chapters, including this introduction and the conclusion chapters. The review of literature is spread over three chapters—Chapters 2 through 4.

Chapter 2 reviews scholarship on sustainability, transformation and subaltern environmentalisms. It critiques the first two concepts and advances a justice-first, present-centred lens of sustainability based on subaltern environmentalisms.

Chapter 3 offers a nested background to the case study location starting with India’s relevance in global environmental discourse, tracing the political history of Tamil Nadu, and situating Ennore within this context. This chapter also contains a review of literature on environmental movements in India.

Chapter 4 deals with concepts and frameworks, including theories of ignorance, and the ignorance-based frameworks of ‘civil’ dispossession and Epistemology of Resistance. It then reviews relevant literature on Lefebvrian spatial politics, Insurrectionary Political Ecology and subaltern resistance to develop the Political Ecology framework of Transformative Resistance.

Chapter 5 contains a descriptive account of the methodology, and includes two methodological contributions—namely, principles of solidarity and solidarity ethnography.

Chapters 6, 7 and 8—on erasure, emergence and transformation respectively—are the substantive chapters containing empirical analysis of data. Chapter 6 traces and presents an ignorance-based analysis of colonial, post-independence and neoliberal erasures in Ennore. It introduces several new ignorance concepts to explain the mechanisms of dispossession.

Chapter 7 analyses three sub-case studies to show how fishers used legal, spatial and cultural practices to emerge from the margins, building power and recognition in the process.

Chapter 8 draws from the previous two chapters to theorise the transformative potential of subaltern resistance, including through productive acts of imagination such as the *People's Plan*.

Chapter 9 is the Conclusion, which summarises findings, reflects on their significance, flags empirical, conceptual and methodological contributions and identifies future research opportunities.

Chapter 2

Who Will Save the World?

Competing Visions on Sustainability and Justice

In the lead up to the 50th anniversary of the 1972 Stockholm Conference on the Human Environment, the United Nations (UN) Secretary General declared that humanity faces triple planetary crises—of climate change, biodiversity loss and pollution (United Nations, 2022). The driver of these crises, the “limited paradigm of economic growth,” also drives a fourth planetary crisis, that of inequality, that finds no place in the global agenda (Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services [IPBES], 2019, p. 19). For all its bombast, economic growth has done little to mitigate global inequalities which “seem to be about as great today as they were at the peak of Western imperialism in the early 20th century” (Chancel et al., 2022, p. 12).

Convincing critiques of capitalism and economic growth have been advanced since at least the 19th century by Marx (1976, 1981), Lotka (1925), Boulding (1966), Georgescu-Roegen (1975) and Daly (1971). These brought about a wayward, mechanistic economics back to earth by pointing to its biophysical roots, the laws of thermodynamics and its inherent limits. Ecological economics and degrowth emerged from this biophysical turn (Fischer-Kowalski & Hüttler, 1998; Martínez Alier & Schlüpmann, 1990).

The concept of growth had its first public existential crisis in the 1970s when it and growth-led development were blamed for environmental degradation and worsening inequality. Meadows et al. (1972) flagged the ‘limits to growth,’ while others called out the myth of trickle-down development and the folly in viewing growing per capita income as an indicator of development (Arndt, 1983). Five decades on, growth is again in the cross hairs. The ‘limits’ discourse which was relegated to the margins in the interim by a powerful meta-narrative—of “sustainable development”—has also re-emerged with some force. Even staid organisations like IPBES (2019) and the Intergovernmental Panel on Climate Change [IPCC] (2022) now insist that nothing short

of societal transformation to sustainability—an impossible feat within the growth paradigm—can address today’s multiple socio-ecological crises at play (IPBES, 2019; IPCC, 2022).

But what exactly is sustainability transformation? Who defines it and using what means? Who will bring that about? How will we know when change is transformative and sustainable? What about justice and just transitions? These are deeply political questions. This chapter traces the evolution of ‘sustainability’ and ‘sustainable development’ and interrogates the constant tension between status-quoist and radical tendencies in how these concepts are interpreted and realised by elite and subaltern agents.

The chapter does this in six sub-sections. Sub-sections One and Two trace the origins of, and the conceptual tensions around, sustainability, sustainable development and sustainability transformation. Sub-sections Three and Four review the study of sustainability transformation, with particular attention to social-science research that brings critical and radical perspectives to the field. Shifting the research gaze from top-down, elite-led transformation, Sub-section Five explores framings of subaltern environmentalism as potential forces of transformation and ends with a conceptual overview of literature on the ontological turn to the study of environmental/resource conflicts. The final sub-section reflects on the implications of these ideas in terms of the research questions this thesis addresses.

2.1. Sustaining Development. . .

The term “sustainable” *nee* “*nachhaltig*” has German ancestry, born of anxieties over imminent scarcity of key resources such as timber about 250 years ago (see Grober, 2007, for a discussion of the early origins of the word “sustainable”). Sustainable yield refers to a level of harvest of renewable resources, like timber or fish, that can be sustained indefinitely. As an Enlightenment-era conceptual brainchild, sustainable (scientific) forestry—measuring and extracting a sustainable yield—was rooted in a reductionist, Newtonian view of Earth as machine and forests as timber.

The term entered 20th century political discourse through the Club of Rome's *The Limits to Growth* (Meadows et al., 1972) which imagined a world system in “a desirable sustainable state of equilibrium” (p. 180) “without sudden and uncontrolled collapse and. . .capable of satisfying the basic material requirements of all of its people” (p. 158). Curiously, despite powerful critiques, scientific forestry and sustainable harvesting live on in their modern avatars—less as cubic metres of timber than as metrics that reduce land to biodiversity or climate to tonnes equivalent of CO₂.

Sustainability's evolution from extractivist forestry to a term denoting desirable characteristics of a world system unfolded alongside an emerging concern for social justice. But that evolution remained confined within a western, theological framework. In 1974, the World Council of Churches—bringing together liberation theologians, pacifists and ecologists celebrating God's creation—replaced its long-standing ideal of “responsible society” with a “just and sustainable society” (World Council of Churches [WCC], 1974, as cited in Grober, 2007, p. 6). Drawing on both the Bible and eco-marxist thinking, the Council called for “husbanding of resources and a reduction of expectations of global economic growth” and for a transition to a sustainable global welfare society (p. 6). Nature as a site of resources and sustainability as the ‘husbanding’ of resources thus entered mainstream discourse powerfully, if unwittingly, and in doing so reinforced the very same patriarchal values that progressive forces were critiquing.

As an adjective modifying ‘development,’ ‘sustainable’ first appeared in the 1980 World Conservation Strategy (WCS) released by the International Union for the Conservation of Nature (IUCN) and Natural Resources (renamed IUCN), the UN Environment Programme and the World Wildlife Fund (renamed World Wide Fund for Nature). The strategy's “overall aim” was “achieving sustainable development through the conservation of living resources” (IUCN, 1980, as cited in Lele, 1991, p. 610). The limits discourse, accompanied by Malthusian survivalist anxieties, alarmed developing countries who saw this as a threat to their Western-style development aspirations. IUCN's formulation was therefore conditionally welcomed as a step “toward reconciling

the interests of the development community with those of the environmental movement” (Khosla, 1987, as cited in Lele, 1991).

IUCN’s focus on living resources and criticism that WCS concerned itself narrowly with ecological sustainability was clarified in subsequent years. In 1986, WCS’ co-authors organised a conference on conservation and development that committed sustainable development to five broad requirements: “(1) integration of conservation and development, (2) satisfaction of basic human needs, (3) achievement of equity and social justice, (4) provision of social self-determination and cultural diversity, and (5) maintenance of ecological integrity” (Jacobs et al., 1987, as cited in Lele, 1991).

In 1987, the UN’s epoch-making *Our Common Future* (World Commission on Environment and Development [WCED], 1987) injected “sustainable development” into global political and policy vocabularies. Responding to the fears of the time, the report defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (p. 43). Although brief and capacious, WCED’s (1987) seven strategic imperatives clarify intended pathways and objectives: “(1) reviving growth; (2) changing the quality of growth; (3) meeting essential needs for jobs, food, energy, water, and sanitation; (4) ensuring a sustainable level of population; (5) conserving and enhancing the resource base; (6) reorienting technology and managing risk; (7) *merging environment and economics* in decision making” (p. 49. Emphasis added). The report concludes with a call for a political system that promotes participatory decision-making and an international system based on sustainable trade and finance practices.

WCED’s version of sustainable development marked a substantial departure from the phrase’s radical, growth-critical roots. Rather than absorb from ecological economics the embeddedness of economy within nature, it maintained a nature-society duality but opted to “[merge] environment and economics in decision-making” (p. 49). It loosened the limits of a finite-planet perspective as evident in Meadows et al’s (1972) report by recommending “a new era of economic growth—growth that is forceful and at the same time socially and environmentally sustainable” (WCED, 1987, p. xii). As a powerful tool for consensus, this move drew widespread support from the mainstream, including

businesses, governments, multilateral banks and agencies, and NGOs like WWF and Worldwatch Institute (see Carruthers, 2001; Lele, 1991; Meadowcroft, 2000), and prompted so many gatherings that it has been called “the mantra that launched a thousand conferences” (Dowie, 1995, as cited in Carruthers, 2001, p. 93).

But it also prompted powerful criticism for having defanged a radical concept.

Carruthers (2001), for instance, laments that:

[from being] a discourse of resistance, fusing radical environmental consciousness with a critical rethinking of a failed development enterprise. . . challenging questions about scarcity and limits, affluence and poverty, global inequality, and the environmental viability of westernisation. . . today, sustainable development has been transformed, stripped of its critical content, and reconfigured for compatibility with the larger priorities of the post-Cold War era. (p. 93)

Others, like Lele (1991), remained sceptical of the value of sustainable development and wary of its proneness to elite capture.

The earlier emphasis on social justice and equity evident in the proceedings of the 1974 WCC meeting and the 1986 Conservation and Development conference of IUCN (IUCN, 1986; WCC, 1974, as cited in Grober, 2007) was now less evident or rendered open to interpretation. Some worried that justice and equity had been replaced by a poorly developed reference to increased public/citizen/local participation. Referring to the usage of equity, participation and decentralisation interchangeably, Lele (1991) describes the suggestion “that participation and decentralization are equivalent, and that they can somehow substitute for equity and social justice” as “at best a naïve one” (p. 615). Others interpreted the WCED report more favourably. Holden et al. (2014), for instance, derive four primary dimensions of sustainable development, namely, “safeguarding long-term ecological sustainability, satisfying basic human needs, and promoting intragenerational and intergenerational equity” (p. 131). These dimensions, they argue, are non-negotiable “fundamental objective values and not subjective individual preferences” (Daly, 2007, cited in Holden et al., 2014, p. 131). Relying on the

WCED (1987) report's conditional endorsement of growth¹⁴, Holden et al. (2014) argue that “economic growth is not one of the primary dimensions of sustainable development” (p. 131).

WCED's conditionality notwithstanding, economic growth came to be treated as a primary dimension of sustainable development, as academic and policy discourse urged nations and firms to balance ecological, economic and social considerations as the triple bottom-line (Elkington & Rowlands, 1999; Fischer et al., 2023; United Nations General Assembly, 2012). This shift was influenced, at least partly, by developing-country anxieties that environmental priorities would hamper poverty alleviation efforts (Mudaliar & Kashwan, 2024). Sustainable development became an opportunistic repackaging of growth and prosperity—from being causes of environmental degradation and inequality to becoming its cure (Escobar, 1995). Poverty was reframed as a cause of environmental degradation (Gray & Moseley, 2005); increased growth and freer—if not fairer—trade were positioned as cures for both. WCED's language invited such readings by recasting scarcity and limits not as absolutes but as challenges to be overcome by human ingenuity, technology and reformed growth and trade (Dryzek, 2021; Escobar, 1995; Sachs, 1992).

The WCED report may have attempted to address developing-country anxieties about environmental restrictions on development. Yet its laudable goals of intra and international equity never materialised. Aided by a mounting Third World debt crisis, inequity deepened through global neoliberal expansion. Developing countries—long exporters of raw materials to former colonisers—remained trapped in extractive economies, corporate abuse, and technology/trade deficits. Their demands for a New International Economic Order—through technology transfer, institutions to regulate commodities, trade and corporations, and reduced dependence on commodity exports—were blunted at the 1981 International Meeting on Cooperation and

¹⁴ The WCED (1987) report states: “Meeting essential needs depends in part on achieving full growth potential, and sustainable development clearly requires economic growth in places where such needs are not being met. Elsewhere, it can be consistent with economic growth, provided the content of growth reflects the broad principles of sustainability and non exploitation of others. But growth by itself is not enough. High levels of productive activity and widespread poverty can coexist, and can endanger the environment” (p. 44).

Development held in Cancún where U.S. President Ronald Reagan declared “an end to the search for new international institutions” (Sneyd, 2023).

What was a mere suggestion in the 1980s became a strident call to solve by growing by 1992, when the UN proposed Agenda 21 at the Earth Summit in Rio de Janeiro. Adopted by 178 nations, “Agenda 21 erased the line between “sustainable development” and “sustained economic growth” as the former joined neoclassical capitalism and liberal democracy to complete a picture of hegemonic universalism (Carruthers, 2001, p. 100). In the following decade, much of the developing world economies underwent harsh structural adjustment measures administered by the International Monetary Fund and the World Bank.

UNICEF responded to reversals in health, education and child nutrition in the global south with calls for “adjustment [policies] with a human face” (Jolly, 1991). Around the turn of the millennium, as neoliberal development reinvigorated growth—amid yawning equity deficits—in many of these economies, an ironic new phrase—“development with a human face” (PTI, 2011)—appeared. In the two decades since, ‘successful’ growth-first-equity-later pathways have top-loaded all wealth. In India, for instance, national income share of the top 10 per cent of the Indian population surged from 30 per cent in 1982 to 60 per cent in 2022 (Bharti et al., 2024). Pursuit of western-style development and consumption deepened inequality by ravaging the commons and impoverishing communities as nations colonised within their own borders.

2.2. Sustainability Transformation

Increasing evidence of human-induced climate change and intensifying conflicts around neoliberal excesses of extraction, enclosure and alienation caused the limits and scarcity discourses to re-emerge more forcefully and from different quarters. Sequels to the Club of Rome’s *The Limits to Growth* were released in 1992 (Meadows et al., 1992) and 2002 (Meadows et al., 2002). Where the 1972 report emphasised hope in the fact that the limits had not been breached, the 1992 update declared that growth had already overshoot sustainable levels in 1980. In 2009, Earth system scientists proposed nine planetary boundaries that must not be transgressed to keep human

activities from tipping the planetary scales (Rockström et al., 2009). Raworth's (2012) 'doughnut model' built on this framework by inserting social boundaries as minimum social foundations—including basic human needs, equity, equality and enabling conditions such as peace and justice. The doughnut thus represented an environmentally sustainable and socially just space for humanity (Raworth, 2012).

Even as the limits discourse has evolved, so too have the narratives around sustainable development. Newer avatars of ecological modernisation (Dryzek, 2021; Spaargaren & Mol, 1992) including green growth and green capitalism (Hammond, 2020), have sprouted from within the confines of liberal capitalism. Global Green New Deals (Perry, 2021) and Green New Deals are framed as win-wins for climate, planet, justice and equity (Pollin, 2019); as useful only if decoupled from growth (Mastini et al., 2021); or as recipes for creating new "green sacrifice zones" and "reproducing contemporary colonial relations of injustice" (Zografos, 2022, p. 47).

Over the last two decades, capitalist modernity has come to be recognised not only as a self-contradictory and nihilistic system, but also as one that deepens the very crises it generates, adjusting itself to turn disasters into opportunities for further accumulation. Simultaneously, alternative articulations have gained visibility—buen vivir, 'a culture of life' from South America; ubuntu derived from traditions of mutuality among many African peoples; and ecological swaraj based on the Indian freedom movement's emphasis on swaraj or self-governance. Together these visions deconstruct the dominant development discourse centred on metrics like GDP to propose alternative visions of a good life (Kothari et al., 2019; Solon, 2019).

The critique of capitalism and growth, along with degrowth concepts, has also entered mainstream debate. The contribution of Working Group III to the Intergovernmental Panel on Climate Change (2023)'s sixth assessment report, for instance, contains 23 mentions of degrowth and reviews prominent literature that highlight the unsustainability of capitalism and reformist approaches to sustainability transformation. Yet, 'transformation,' like its vague cousins sustainability and development, remains a servant of the worldview that defines it. The challenge, then, is not only the failure to address root causes but the refusal to acknowledge that in a

world where many worlds and worldviews exist, any universal definition of problems, causes and solutions is a fraught proposition.

2.3. Studying Transformation

While a transformation—of growth and “patterns of consumption and production”—was already implied in early discourses of sustainable development (Meadowcroft, 2000, p. 379), some doubted its transformative potential. Sneddon (2000), for instance, argued that sustainable development “perceives poverty rather than poverty-producing conditions as the root cause of environmental degradation” (p. 525). The phrase, Sneddon argued, “has reached a conceptual and political dead-end” (p. 524). Instead, he recommended following researchers who critique socioecological transformations by “examining ‘sustainability’ through conceptual lenses that effectively divorce it from its problematic partner ‘development’” (Callicott & Mumford, 1997; Reed & Slaymaker, 1993, as cited in Sneddon, 2000, p. 524).

The term “transformation”—especially towards sustainability—has since taken root in academic and policy circles to describe the rapid, radical changes deemed necessary to confront global eco-social crises (Feola, 2015; Scoones et al., 2020). However, this term too suffers from “high conceptual elasticity and lack of empirical grounding” heightening “the risk of voiding the term of meaning” (Feola, 2015, p. 377).

Despite these limitations, interest in conceptualising transformations has grown (Patterson et al., 2017). A broad consensus now defines transformation as “fundamental changes in structural, functional, relational and cognitive aspects of socio-technical-ecological systems that lead to new patterns of interactions and outcomes” (Patterson et al., 2017).

Stirling (2015, p. 54) prefers to introduce a sharp distinction between transitions and transformations:

On one hand, are ‘transitions’: managed under orderly control, through incumbent structures according to tightly disciplined knowledges, often emphasizing technological innovation, towards some particular known

(presumptively shared) end. On the other hand, are ‘transformations’, involving more diverse, emergent and unruly political alignments, more about social innovations, challenging incumbent structures, subject to incommensurable knowledges and pursuing contending (even unknown) ends.

A wide range of approaches has been proposed to interrogate transformations (See Table 1). Conceptually, these include socio-technical transitions (Geels, 2010), social-ecological transformations (Olsson et al., 2006, 2014; Westley et al., 2011, as cited in Patterson et al., 2017), transformative pathways to sustainability (Leach et al., 2012, 2013; Stirling, 2014, as cited in Patterson et al., 2017) and transformative adaptation (Pelling, 2011; O’Brien and Selboe, 2015, as cited in Patterson et al., 2017).

On the basis of domains too, Patterson et al. (2017) list work done on energy, water, food and urban systems and green jobs among others. Identifying the principal agent of transformation provides another useful framing with four overlapping processes of transformation—technology-led, market-led, state-led and citizen-led transformations. Each theorises change and the politics involved in distinct ways (Scoones, 2016).

Table 1

Conceptual approaches to transformation.

Approach to Transformation	Disciplinary Origins	Key Concepts
Socio-technical transitions	Technology studies, institutional analysis, institutional economics	Prominent concepts include a multi-level perspective (i.e. niche, regime, landscape levels) where transition is understood to involve change at multiple levels, and co-evolutionary change involving technological, social, institutional, and economic systems.
Social-ecological transformations	Ecology (complex adaptive systems theory) plus “eclectic diversity of social science disciplinary perspectives.”	Prominent concepts include resilience, adaptability and transformation. The latter denotes the purposefully navigated or unintended process by which a fundamentally new system emerges due to ecological, economic or socio-political conditions that render the existing system untenable.
Sustainability pathways	Anthropology, development studies, economics, political science, complex systems	Sustainability pathways is a critique of technocratic, depoliticised approaches. Shaping pathways involves dealing with “contested values, multiple narratives of change, and the politics of knowledge,” requiring challenging of dominant narratives, empowerment of marginalised actors and placing institutions, politics, equity and social boundaries centre stage.

Transformative adaptation	Human geography, political ecology, development studies	Dissatisfied with growing emphasis on accommodating change as focus of adaptation, this approach demands attention to contesting change and creating new alternatives and possibilities. It aims to alter fundamental systemic structures and paradigms that produce vulnerability.
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Note. Adapted from *Exploring the governance and politics of transformations towards sustainability*, by J. Patterson, K. Schulz, J. Vervoort, S. van der Hel, O. Widerberg, C. Adler, M. Hurlbert, K. Anderton, M. Sethi, & A. Barau, 2017, *Environmental Innovation and Societal Transitions*, 24, 1–16 (<https://doi.org/10.1016/j.eist.2016.09.001>).

Similarly, Scoones (2016) distinguishes three complementary, though separate, approaches—structural, systemic and enabling approaches—to understanding and engendering transformations. Structural approaches refer to radical changes in governance, organisation and practice of production and consumption. Systemic approaches—which have been critiqued for downplaying political complexities and individual agency (Brown, 2014; Meadowcroft, 2000)—denote intentional change directed at domain-specific institutions, technologies and actor networks to shift systems towards normative goals. Enabling approaches foster human agency by nurturing capacities that help individuals and collectives act on their own behalf (Scoones et al., 2020).

Scoones (2016) also draws on Watts and Peluso (2013) to present a scheme for analysing socio-environmental change through three overlapping “regimes” of truth, rule and accumulation. Regimes of truth govern the nature and direction of transformations and can be unpacked using Foucaultian analyses of knowledge and power. They answer questions about who understands what and in which frame. Regimes of rule concern governance and control, illuminated by Gramscian concepts of hegemonic rule, historic blocs and contentious politics between citizens and state. Regimes of accumulation refer to who gets what and how it is distributed as understood using Marx’s concept of primitive accumulation, Harvey’s (2005a) accumulation by

dispossession and Polanyi's (2001) notion of fictitious commodities (of land, labour and money).

While each approach brings valuable insights, their strengths and limitations lie in how they treat individual and collective agency (both human and non-human), the degree of attention paid to cultural¹⁵, political and local complexities and specificities, whether they adopt long historical views, and their ability to grapple with multi-level, polycentric and dynamic nodes of power and governance.

2.4. Deconstructing Transformations: Social Science Perspectives

Social science scholars have long engaged with transformation scholarship to spotlight neglected and under-theorised subjects. Feola et al. (2021), for instance, identify an “innovation bias” in sustainability transformation research where novelty and emergence are overvalued, while processes of deconstruction, un-making and disarticulation of unsustainable, unjust configurations are neglected (p. 2). Some exceptions present transformation as the “deconstruction of and liberation from capitalist imaginaries of endless economic growth” (Latouche, 2010, as cited in Feola et al., 2021, p. 2) or the “breaking of capitalist habits” (Wilhite, 2016, as cited in Feola et al., 2021, p. 2). Struggles aimed at dismantling unjust policies and institutions, and breaking down practices of oppression, thus emerge as exercises in creative deconstruction.

Another bias arises from treating capitalism as a given. Sustainability Transitions Research (STR), for instance, is now a rich field to study responses to “new environmental problems” such as climate change, biodiversity loss and resource depletion. It underscores the need for “substantive [socio-technical] transitions” as opposed to the incremental adoption of clean technologies that characterised earlier responses to pollution (Geels, 2010). STR has drawn deeply from the multi-level

¹⁵ The aspect of culture, a critical element, is dealt with in greater detail below in the section titled “The Ontological Turn.”

perspective (MLP) (Geels, 2002; Rip & Kemp, 1998, as cited in Geels, 2010; Geels & Schot, 2007), which conceptualises transitions across three levels—niches (sites for radical innovations), socio-technical regimes (stable but locked-in systems) and socio-technical landscapes (the most stable, meta-level contexts). Transitions are defined as regime shifts driven by interactions across these levels.

But Feola (2020) points out that STR does not engage with any significant “critiques of capitalism” despite its claims to ask “big picture questions” regarding non-linear and radical societal change (p. 241). Instead, capitalism is treated as a fixed backdrop at the landscape level in the MLP framework, despite critical scholarship explicitly calling for its interrogation. This strand of scholarship insists that transformation must require viewing capitalism as more than just an “additional ‘landscape’ factor” (Feola, 2020, p. 242). Kemp et al. (2018) similarly highlight the need for ‘systemic change’ not merely within socio-technical systems but in capitalism itself (as cited in Feola, 2020, p. 2).

Emerging work also punctures the narratives of green growth and green capitalism (Hickel & Kallis, 2019), questioning the feasibility of decoupling capitalist development from ecological degradation (Haberl et al., 2020; Parrique et al., 2019, as cited in Feola et al., 2021). Others have called out post-political framings like Anthropocene which identify an undifferentiated ‘humanity’ as a geo-physical agent (Haraway et al., 2016; Ranganathan & Bratman, 2021; Ranganathan & Doshi, 2018).

Social scientists have tried to salvage some analytical value from the Anthropocene concept by suggesting that ecological crises cannot be addressed without a “state shift” in our understanding of the political economy within the earth system (Dryzek & Pickering, 2018). However, uncritical uses of the Anthropocene obscure the violent histories of accumulation and dispossession that define capital-nature relations, and project an undifferentiated humanity as both cause and victim of ecological degradation (Ranganathan & Doshi, 2018). The result is a dystopian “neoliberal Anthropocene,” where global responses to environmental crises are shaped by neoliberal logics of market governance and depoliticised management that amplify structural inequality and suffocate democratic action (Purdy, 2015, p. 49).

Haraway et al. (2016) have similarly lamented Anthropocene's tendency to decentre non-human agency and reduce complex entanglements involving more-than-humans into a simplistic "human species act" (p. 539). Kaika (2019) suggests disengaging altogether with the notion of the anthropocene, and "shift focus and energy. . . to symbolize the alternative imaginaries that emerge across the world and that need our immediate attention" (p. 247).

A third shortcoming is the limited engagement of transformation research with social movements as forces of transformation and experiential sources of what radical change may look like from the margins. While their relevance to transformation is acknowledged, social movements remain under-studied. For instance, the IPCC's (2023) sixth assessment report has a section on "Civil Society and Social Movements" (p. 1508) based on peer-reviewed studies of non-state actors' influence on climate policy. An excerpt is worth reproducing here:

The overall impact of transnationally-organised civil society action and social movements for international cooperation on climate change mitigation has not been comprehensively evaluated in the literature. This may reflect the polycentric organisation of the movement, which poses challenges for coordinating between groups operating in different contexts, acting with different strategies and around multiple issues, and lobbying multiple decision-making bodies at various levels of government in a sustainable way (Tormos-Aponte and García-López 2018). There is some literature emerging on environmental defenders and their need for protection against violence and repression, particularly in the case of indigenous environmental defenders who face significantly higher rates of violence (Scheidel et al. 2020). Scheidel et al. (2020) also find that combining strategies of preventive mobilisation, protest diversification and litigation can enhance rates of success for environmental defenders in halting environmentally destructive projects. In the area of climate litigation, commentators have noted the potential for activists and even researchers to suffer retaliation through the courts as a result of 'strategic lawsuits against public participation' and lawsuits against researchers brought by fossil fuel interests (Setzer and Byrnes 2019; Setzer and Benjamin 2020). (Intergovernmental Panel on Climate Change, 2023, p. 209)

This extract illustrates both the value of peer-reviewed research and the need for more diverse and context-specific studies of social movements. Drawing from the discussion on innovation bias, one could argue for a greater focus on agonistic struggles in aiding transformative change. The IPCC's (2023) review reveals a scalar bias: it mentions transnational mobilisation and polycentric organisation and the use of "simultaneous demonstrations across several countries" (p. 1508). These necessarily draw on local movements, including campaigns opposing unjust land-use changes, environmental discrimination, and development projects. The absence of citations to research on local and national struggles signals either an academic vacuum ripe for inquiry or a design flaw in the scope of the IPCC review.

This omission compounds concerns that the IPCC operates exclusively within a Euro-modern worldview, drawing disproportionately on quantitative and positivist evidence while engaging poorly with qualitative and non-positivist traditions (Carmona et al., 2023). Such exclusions further marginalise alternative epistemologies and silence knowledge from the margins.

The plurality of approaches to studying transformations is a strength given the diverse grassroots initiatives that engage power and assert the inseparability of justice and equity from environmental values. Scoones et al. (2020) distil this plurality into three guiding principles for scholars, activists, and policy analysts seeking to theorise and enact sustainability transformations: first, to take diverse knowledges seriously, recognising that transformations may arise from multiple worldviews and epistemologies and cannot be reduced to a singular expert-led pathway; second, to take plural pathways seriously, acknowledging that diverse knowledges imply multiple desired outcomes and routes to reach them, which in turn require deliberative spaces where implications for different groups are openly confronted; and third, to take politics seriously, by recognising diverse epistemic communities as sources of insight capable of reframing dominant policy narratives, reopening hegemonic closures, and liberating new possibilities.

Yet, even with these principles, much of STR remains biased toward elite, managerial pathways where transformation is cast as a planned process toward intended

outcomes. Of the four approaches outlined by Patterson (2017) (See Table 1), the first two—socio-technical transitions and socio-ecological transformations—do not envisage any role for subaltern agents. The latter two—Sustainability Pathways and Transformative Adaptation—approaches offer valuable correctives to earlier, technocratic models of change. Yet, they too remain limited in interrogating transformation as it unfolds through subaltern struggle. These approaches advance plural, justice-oriented visions of innovation that foreground grassroots agency and local knowledges even as they reinforce the innovation bias (Leach et al., 2012; Westley et al., 2013). Here too expert intervention by sustainability brokers is seen as central—linking innovative grassroots capacity and local meanings of sustainable development with transformative processes working within universal, social and planetary boundaries.

Despite the inclusion of grassroots agency and insistence on attention to local particularities, these approaches remain techno-managerial in nature inclined to engineering a managed emergence of transformation. In treating transformation as a generic socio-ecological process, these approaches flatten and de-historicise the global political economy by rendering the violence, dispossession and structural inequities that underpin it as adaptive challenges to be overcome rather than historical injustices to be addressed. Hamstrung by their neglect of the constitutive role of capitalism, colonialism and state violence in defining structural relations of power, these approaches are ill-equipped to examine transformations that emerge from conflict, refusal and resistance in spaces of dispossession.

Such framings underplay the emergent nature of actors and processes, obscure indeterminate ends, and risk producing new forms of exclusion while reproducing older ones. If as Medina (2011) argues, ontological difference and “epistemic friction”¹⁶ (p. 21)

¹⁶ According to Medina, epistemic friction “means guaranteeing that eccentric voices and perspectives are heard and can interact with mainstream ones, that the experiences and concerns of those who live in darkness and silence do not remain lost and unattended, but are allowed to exert friction” (p. 21). See Medina, J. (2011). Toward a Foucaultian epistemology of resistance: Counter-memory, epistemic friction, and guerrilla pluralism. *Foucault studies*(12), 9-35. <https://doi.org/10.22439/fs.v0i12.3335>

are inevitable companions in the politics of knowledge, then transformation research must also turn to those frictions and ask: where do transformative approaches to sustainability emerge from when seen from the margins?

2.5. Subaltern Environmentalisms: Hope in the Margins

Neoliberal development and mainstream environmentalism have provoked numerous counter-movements by subaltern communities. These movements articulate alternative discourses of land, environment, justice and the good life, and seek recognition for marginalised ways of knowing and inhabiting the worlds (Escobar, 2016; Martinez-Alier et al., 2017). For the dominant actors—states and corporations—who present themselves as architects of sustainability transformation, such movements are fraught, often viewed as disruption rather than contribution.

Even as status quoist debates to address ecological breakdown are carried out within high-security convention halls, social movements of youth, peasants, fishers, labour unions, and Indigenous peoples demanding radical action are met with water cannons and police batons on the streets outside. These visible protests represent only a fraction of the million everyday struggles waged to defend homelands, protect rights, dismantle oppressive structures, and enact multiple alternative realities. For subaltern communities, such experiments in transformative change are not policy exercises but matters of life and death.

The battle for the margins, from the margins and by the marginalised has protected more cultural and ecological diversity than elite efforts or state action. Indigenous peoples and local communities collectively protect more than a fifth of the world's land, often at enormous personal risk (ICCA Consortium, 2023)¹⁷. In 2022 alone, 177 environmental defenders were killed for resisting destructive state and corporate projects (Global Witness, 2023).

¹⁷ According to ICCA Consortium, ICCA is not an abbreviation but a term used to denote territories and areas conserved by Indigenous Peoples and local communities.

International negotiations over the past three decades have consumed vast resources but yielded little substantive progress in reducing emissions, halting ecological decline, or addressing inequality (Centeno, 2020; Hulme, 2011). The UN Secretary General Antonio Guterres summed it up well when he said “Some government and business leaders are saying one thing but doing another. Simply put, they are lying” (United Nations, 2022).

2.5.1. Transformational Struggles

While states, industries and to some extent civil society actors are commonly theorised as agents of transformation (see Köhler et al., 2019), the subaltern as an agent of political change has not received the attention it deserves. Following Gramsci, the subaltern denotes those denied access to hegemonic power, but not simply as subordinated classes but as potential protagonists of insurgency and political change (Guha & Spivak, 1988). Writing of the Indian context, Guha (1988) introduces the subaltern narrative as the “politics of the people” to correct the “un-historical historiography” of colonial elites (p. 40). From another context, Smith (2021) describes struggle as both theory and practice that empowers subaltern groups, mobilises agency and “turn[s] the consciousness of injustice into strategies for change”. The act of engaging in struggle itself embodies what McAdam (1999) calls cognitive liberation—a transformation in collective consciousness that makes resistance possible.

Subalterns, such as peasants and fishers, have been ignored or “silenced” or spoken for and seen at best as proletariat-in-the-making (Spivak, 2023, p.54) rather than acknowledged as historical agents. Tied to identity and territory, subaltern agency becomes visible through the work of postcolonial scholars like Guha and Spivak, and Indigenous scholar-activists such as Smith. This has inspired concepts that foreground place-based insurgencies: Roy (2011) speaks of “subaltern urbanisms” where slums are seen not as failures but as sites of transformative politics and “terrain[s] of habitation, livelihood, self-organization and politics” (p. 223). Benjamin (2008) coins “occupancy urbanism” to describe the subversive practices by which urban poor assert territorial claims to ‘real estate surpluses’ (cited in Roy, 2011, p. 228).

Partha Chatterjee's (2006) distinction between civil and political society further clarifies subalternity. Civil society, a domain of rights-bearing, enfranchised bourgeois citizens, engages the state through lawful means. Political society, by contrast, comprises marginalised groups whose claims to habitation and livelihood necessarily involve violations of law. This is an analytically helpful, though porous, distinction: the two spheres are neither mutually exclusive, nor are their modes of action confined to what is strictly legal or illegal. In postcolonial contexts, where liberal democracy cannot account for mass political participation, political society tactics—demonstrations, protests, civil disobedience, or other extra-legal actions—become crucial. Importantly, these strategies do not exclude simultaneous engagement with formal state institutions: squatters may occupy land illegally while also pursuing legal remedies in court.

Fraser (2008) echoes this when critiquing Habermas' public sphere. In stratified societies, the public sphere requires participants to behave as if they were equals, masking deep inequalities. In response, subordinated groups create "subaltern counterpublics"—alternative spheres where women, peasants, labourers, people of colour, and queer communities "invent and circulate counter-discourses," reinterpret their identities, needs, and interests, and influence discourse through interaction with the "public-at-large" (p. 84).

Despite this rich body of theory and of transformation practices in the margins, stories of sustainable transformation told from the subaltern standpoint are scarce. Only recently have scholars begun to centre social struggles, especially of historically marginalised communities, as engines of sustainability transformation. Emancipatory social struggles (Stirling, 2015; Temper, Walter, et al., 2018), citizen action and social movements (Scoones et al., 2015), place-based struggles (Escobar, 2001), environmentalism of the poor (Guha & Martínez-Alier, 1997) and ecological distribution conflicts (EDC) (Scheidel et al., 2018) all position the subaltern as a critical force for sustainability transformations.

2.5.2. Environmentalisms of the Poor

A classic and oft-repeated notion suggests that environmentalism emerges only after basic material needs are fulfilled. Inglehart's (1977) argument that environmentalism is a post-materialist value, along with former Indian Prime Minister Indira Gandhi's famous 1972 Stockholm conference remark—"Aren't poverty and need the greatest polluters?"—have this view of environmentalism as a full-belly activity. Yet, neither said the poor were incapable of environmental action (Abramson, 1997; Mudaliar & Kashwan, 2024).

This hypothesis appears puzzling given the long history of conflict, rebellion, and even war sparked by resource extraction, deforestation, enclosure, and environmental degradation under both colonial and post-colonial regimes. Two factors may explain its persistence. First, neoclassical economics created fertile ground for such assumptions through models like the Environmental Kuznets Curve, which posited an inverted U-shaped relationship between economic growth and environmental quality: degradation would rise with per capita income and later decline after a certain threshold (Stern, 2018). Second, capitalist production relations produced a disjuncture between material well-being and one's immediate surroundings, obscuring how livelihoods remain tied to ecological conditions.

In the global south, large populations of poor and marginalised people continue to rely on the commons and unowned nature for survival. Scholars such as Guha and Martínez-Alier (1997), Agarwal (1992) and Dunlap and Mertig (1997) have demonstrated the material basis of subaltern environmentalisms. They argue convincingly that the affluence of elites is the primary driver of ecological decline, which disproportionately impacts the poor and provokes resistance to the erosion of their material well-being. These environmentalisms of the poor (Martinez-Alier, 2009) highlight the inseparability of environmental protection and social justice; they respond to the metabolic disruption caused by enclosure or degradation of local "energyscapes"¹⁸ (Howard et al.,

¹⁸ Energyscape is defined as a spatial and temporal representation of life-energy and material flows within water- or land-scapes involving and impacting all species, and the anthropogenic interactions,

2013, p. 17), a disruption that lies at the heart of Ecological Distribution Conflicts (Martinez-Alier, 2002). While the former describes the resistance by commons-dependent communities to activities that threaten their worldviews, moral economies and commons regimes, Ecological Distribution Conflicts, with genealogical roots in Marxian metabolism and ecological economics, typify distributional conflicts generated when economic growth and capitalist metabolism externalise costs onto marginalised communities.

Viewing the environmental struggles of the poor in energy terms offers three insights. First, it expands energy beyond the commodified abstraction central to capitalist ‘work’ (Daggett, 2019; Lohmann, 2021) to include both the life-force pervading all beings -- known as *mauri* in Māori knowledge systems, *orenda* in Iroquois traditions, *chi* in Chinese cosmology, and *prana* in Indian philosophy—and the material flows that sustain multispecies life. Second, it underscores that struggles over access to energy, including food and resources—long predate the modern environmental movement (Fairlie, 2009; Parrott & Marshall, 2019; Ranlet, 1988). Third, it introduces metabolism as a powerful way of understanding the roots of environmental conflict (Scheidel, 2023).

Marx described the “material exchange between man and nature” as *Stoffwechsel* or metabolism (Foster, 1999, p. 209). In biology, metabolism refers to all the life-sustaining chemical reactions in organisms responsible for energy conversion from food to facilitate activities such as growth, reproduction and movement (Metabolism, 2025). Building on this, physicist Robert Ayres coined the term “industrial metabolism” (1989, cited in Fischer-Kowalski & Hüttler, 1998, p. 108) to study energy and material flows in industrial societies. This was later broadened as societal or social metabolism to understand flows in any society—industrial or non-industrial (Fischer-Kowalski & Hüttler, 1998).

Capitalist modernity both accelerates and disrupts these flows, extracting and consuming energy and materials at vastly intensified rates while generating

interruptions and disruptions caused by the capture, conversion, transmission, use and disposal of energy and material (Howard et al., 2017).

unprecedented waste. In contrast, some conservation projects slow societal metabolism by restricting extraction or use within designated areas. However, both acceleration (Martinez-Alier, 2009) and deceleration (Scheidel, 2023) generate conflicts within a finite terrestrial system of “unevenly located and unequally appropriated” energy and resources, and unequal exposure to environmental harms such as pollution or reduced access to necessary resources (Georgescu-Roegen, 1978, cited in Bobulescu, 2015, p. 200). Martinez-Alier (2002) terms these disputes Ecological Distribution Conflicts which expose the limits of economic valuation in capturing the complex relationships between nature and society. Viewing conflicts through the lens of social metabolism of growth has generated scholarship on the unequal distribution of goods and harms during fossil-fuel-based and low-carbon energy generation (Temper et al., 2020), capitalist extraction (Pérez-Rincón et al., 2019), production (Aydin, 2019) and waste disposal (Demaria, 2010; Schindler & Demaria, 2020), and on ecological distribution conflicts as forces of sustainability (Temper, Demaria, et al., 2018; Temper, Walter, et al., 2018).

Escobar (2006a, 2006b) extends the concept of Ecological Distribution Conflicts by introducing the notion of Cultural Distribution Conflicts that grounds the contestations not merely in the material domain but also in the meanings, ontologies, and epistemologies through which nature and society are constituted. Another powerful concept framing such struggles, Environmental Justice, is located precisely at this intersection between the struggle—along race and class lines—for material survival and the pursuit of epistemic and cultural recognition.

2.5.3. Environmental Justice Movements and Theories of Justice

Building on the environmental protests of the 1960s to 1980s by communities of colour, notably African Americans resisting disproportionate exposure to environmental harms, racial justice activists in the United States birthed a powerful new environmentalism: the Environmental Justice (EJ) movement (Bullard, 2018). Empowered by the Civil Rights Act of 1964 (USA) which outlawed discrimination based on race, gender, religion or national origin, communities of colour highlighted the racial bias evident in the siting of hazardous facilities, demanding its recognition as injustice (Bullard et al., 2008).

Early scholarship on the EJ focused primarily on distributional aspects of justice—namely, who received or was denied environmental goods. This emphasis reflected activists’ attention to “distributional patterns that were violations of any number of distributive principles of justice” (Schlosberg, 2007, p. 4). Yet EJ movements also articulated broader justice concerns, and distributional justice itself was inseparable from other, less-defined principles. A landmark in broadening this conception was the First National People of Color Summit (1991) organised by the United Church of Christ’s Commission on Racial Justice. Delegates adopted 17 principles of environmental justice, whose preamble affirmed:

“WE, THE PEOPLE OF COLOR, gathered together at this multinational People of Color Environmental Leadership Summit, to begin to build a national and international movement of all peoples of color to fight the destruction and taking of our lands and communities, do hereby re-establish our spiritual interdependence to the sacredness of our Mother Earth; to respect and celebrate each of our cultures, languages and beliefs about the natural world and our roles in healing ourselves; to ensure environmental justice; to promote economic alternatives which would contribute to the development of environmentally safe livelihoods; and, to secure our political, economic and cultural liberation that has been denied for over 500 years of colonisation and oppression, resulting in the poisoning of our communities and land and the genocide of our peoples, do affirm and adopt these Principles of Environmental Justice:” (First National People of Color Summit, 1991, emphasis as in original).

The statement illustrates how EJ framed justice in material as well as non-material terms, highlighting spiritual interdependence with Mother Earth, respect of cultures, beliefs and identities, and self-determination and participation (Schlosberg & Collins, 2014). Over the last four decades, justice theory evolved beyond Rawlsian notions of liberty, fairness and equality of opportunity, and beyond distributive justice alone. Nussbaum and Sen’s (Nussbaum & Sen, 1993) capabilities approach shifted the focus from distribution of goods; it stressed the need for enabling capacities for individuals to realise their chosen lives by “doing valuable acts or reaching valuable states of being” (p. 30).

The seeds for other strands related to distributive justice theory were sown nearly a century earlier when Marx and Engels (2001) located mal-distribution of consumption in the mal-distribution of conditions of production—a structural feature of capitalism. Building on this, feminist and critical theorists like Young and Allen (2011), Fraser (1995) and Honneth (2004) interrogated the conditions and processes that sustain mal-distribution. Mis-recognition, they argued, is central to maintaining domination, and is a cause of conflict.

Honneth emphasised individual misrecognition—insult or humiliation—as injurious not only because it restricts freedom, but because it damages the intersubjectively acquired “positive understanding of themselves” (Honneth, 1995, cited in Alexander & Lara, 1996, p. 129). Critical of this psyche-centred approach, Fraser (2008) instead positioned misrecognition as a “status injury” with locus in social relations rather than in individual psychology (p. 3). Misrecognition denies subjects the status of equal partners in social interaction, sustained by “institutionalised patterns of cultural value” that mark them as less worthy of respect (p. 3).

Fraser’s reading of recognition accomplished two moves: First, it expanded redistribution beyond class politics and recognition beyond identity politics. Traditional class movements often ignored non-class identities and occluded feminist, anti-racist or anti-caste struggles for economic justice. By linking recognition with redistribution, Fraser bridged the “cultural politics of difference” and the “social politics of equality” (Fraser, 1999, p. 26). Cultural politics was no longer merely about recognition or identity, but also about redressing distributive injustices associated with mis-recognition.

Second, it underscored participation as a third dimension of justice. In critiquing Habermas’ (1989) public sphere, Fraser (2014) argued that even formally inclusive spaces fail when they “bracket” status differentials, pretending as though interlocutors were equals, instead of insisting on “equality as a precondition for participatory parity” (p. 91). True participatory parity, she insisted, requires institutional and social arrangements that allow people to interact as peers. Beyond legal equality and inclusive spaces, Fraser (1999) identified two other conditions: (i) an “objective precondition” to ensure parity by eliminating material inequality and economic dependence; and (ii) an

“intersubjective” condition to preclude cultural patterns that systematically depreciate certain groups (p. 37).

Fraser’s synthesis of recognition, redistribution, and participation accommodates non-essentialist cultural politics—deconstructive feminism, critical race theory and queer politics—alongside conventional identity struggles. In doing so, it opens pathways for examining environmental conflicts as outcomes of intersectional marginalisations embedded in structures and institutions. It also bridges tensions between cultural and ontological politics, refusing to remain confined to questions of representation, identity, or inclusion within Euro-modern binaries. For example, deconstructive feminists advanced women’s causes not merely by demanding equality within a male–female binary, but by insisting on gender’s fluidity and socio-cultural construction. The next section develops this line of argument by turning to ontological politics and examining how liberal multiculturalism, while appearing to embrace diversity, ultimately reinforces dominant ontologies.

2.6. The Ontological Turn

The preamble to the EJ principles hinted at the ontological pluralism underlying environmentalisms of the poor. From the 1990s onward, a surge of scholarship from the global south signalled a powerful ontological turn in the study of environmental conflicts (Flemmer et al., 2024). This turn enriched environmental movement studies across political ecology (Goldman et al., 2018), anthropology (Cadena & Blaser, 2018; Escobar, 2008; Escobar, 2016), and human geography (Tornel, 2022). It reframed subaltern environmental movements and place-based conflicts as struggles against ontological occupation (Escobar, 2016) and for the assertion of the many worlds rendered non-existent by the wilful ignorance (Mills, 2007) of the “One World World” (Law, 2015).¹⁹ This ignorance is not passive but actively maintained through social

¹⁹ The One World World refers to the totalitarian tendency of western ontology to subsume all worlds under itself and present the western, capitalist, post-colonial world as the only credible real world.

processes that suppress, distort or selectively not see in order to sustain domination (Mills, 2022b).

Proponents of this turn argued that deeper insight into environmental movements is possible only by rejecting the fiction of a singular Eurocentric reality and recognising that ontologies exist in the plural. The modern dualistic ontology views nature merely as a stage for human conflicts over resources, with resources reduced to material objects of exploitation, wise use, or conservation. In contrast, the ontological turn highlights realities in which humans, other life-forms, inanimate objects, and forces are bound in webs of kinship and reciprocity. Within such ontologies, ‘managing nature’ means fulfilling reciprocal obligations across multiple relationships (Nadasdy, 2007). By asking “what is at stake, who is struggling, and who gets to decide what is at stake in environmental conflicts?” environmental conflicts are re-presented as ontological politics that can be understood only by “unravelling dissent about knowledge production, power asymmetries, and the political economy at play in managing nature” (Flemmer et al., 2024, p. 608).

Yet despite growing empirical evidence, ontological politics are still not taken seriously enough. Those conditioned by a hegemonic techno-economic rationality are prone to viewing the environmentalisms of the poor dismissively either as material struggles or as post-materialist cultural contestations—rather than understand them as struggles over what counts as nature, what is at stake, and whose worlds and world-making practices matter (Escobar, 2016; Leff, 2017). Environmentalisms of the poor, as seen from the standpoint of the subaltern actors engaged in struggle, is not so much about the environment as it is about certain way of living and relating with their worlds. Labelling these struggles simply as “environmental” traps them within modern ways of apprehending reality and erases the plurality of worlds they seek to defend. For many of these communities, whose languages and lifeworlds are not shaped by Anglophone categories, there is no equivalent word for “environment” as something external to human life. The very term carries a colonial and linguistic hegemony that flattens the dense, lived relationalities their struggles seek to protect.

This erasure is the focus of political ontology²⁰ (Blaser, 2013; Escobar, 2016; Tornel, 2022). Blaser (2009) defines ontology at three levels that bears a full reproduction:

The first layer is a dictionary definition: ‘any way of understanding the world must make assumptions (which may be implicit or explicit) about what kinds of things do or can exist, and what might be their conditions of existence, relations of dependency, and so on. Such an inventory of kinds of being and their relations is an ontology’ (Scott & Marshall 2005). The second layer I borrow from the insights and language of science and technology studies, and in particular from Actor Network Theory: ontologies do not precede mundane practices, rather are shaped through the practices and interactions of both human and non-humans (see Latour 1999; Law 2004; Mol 1999). Hence, ontologies perform themselves into worlds—this is why, as you will see, I use the terms ‘ontologies’ and ‘worlds’ as synonyms. The third layer builds on a voluminous ethnographic record that traces the connections between ‘myths’ and practices: ontologies also manifest as ‘stories’ in which the assumptions of what kinds of things and relations make up a given world [become] readily graspable—again, this warrants my use of the term ‘story’ to refer to a given ontology. Although stories are a good entry point to an ontology, attending only to their verbalized aspect and not to the way in which those stories are embodied and enacted only give us half the story. In other words, ontologies must be understood as total enactments involving discursive and non-discursive aspects.

(p. 877)

Political ontology exposes the limits that cultural politics is yet to transcend. Feminist, anti-racist, subaltern, and Indigenous movements have laboured to make culture count

²⁰ Political ontology and ontological politics are closely related, but different. Political ontology is a reference to the ontological nature of political studies, pointing to the often-invisible ontological assumptions that underlie the nature of political reality under study. From a political ontology perspective, political struggles can be seen as ontological involving worlds in conflict. Ontological politics is about the enactment of that conflict in practice – about the playing out of world-making practices. For a discussion on political ontology, see Hay, C. (2006). Political ontology. In R. Goodin & C. Tilly (Eds.), *The Oxford Handbook of Contextual Political Analysis*. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199270439.003.0004>

as “reasonable politics,” yet cultural claims are still judged by dominant standards of reasonableness (Blaser, 2013, p. 17). Drawing on Latour (1999), Blaser (2013) identifies two “great divides” shaping the modern constitution—the internal divide between nature and culture and the external divide between the moderns and the non-moderns (p. 17).

The moderns claimed not merely to have a culture but to possess knowledge, relegating others’ knowledges to a sub-par status of belief or myth (Blaser, 2013). The mobilisation of this ontological difference—dualistic (modern) vs. relational and fluid (non-modern)—has been central to justifying modernity, and its constituents colonialism and capitalism (Escobar, 2007). By hierarchising difference, non-modern worlds are devalued, nature is posited as the only reality, culture as its subjective gloss, and universalised Western science as the sole rational way to know the former (Blaser, 2009). Euro-ontology’s nature-culture separation is posited as an ability and set against the imputed disability of non-moderns— “Chinese or Amerindians, Azande or Barouya”—who “cannot really separate what is knowledge from what is society, what is sign from what is thing, what comes from Nature as it is from what their cultures require” (Latour, 1999, cited in Blaser, 2013, p. 18).

Naturalism’s (modern ontology) dualistic sense is only one way of comprehending the world. Animism views beings as constituted relationally and totemism traces human and nonhuman collectives back to common ancestors (Descola, 2005, cited in Blaser, 2013). When a Tamil fisher speaks of the wind as ancestor, or Māori invoke Papatūānuku (Earth Mother) and Ranginui (Sky Father), such relations are treated within modernity as metaphor rather than reality (Povinelli, 1995). Subaltern perspectives on labour, economy, and human–environment relations are subordinated because they are framed as “beliefs” rather than as valid epistemologies (Baudrillard, 1975, cited in Povinelli, 1995, p. 506). Liberalism may accommodate such relationships with nature as “culture,” but it denies them ontological validity, and leaves them excluded from dominant environmentalisms and economisms (Nadasdy, 2007; Povinelli, 1995). This ontological discomfort underscores the illiberality of liberalism and its intolerance of

non-dualistic concepts—a theme that will be revisited later as the theory of civil dispossession is developed.

Even global policy circles, such as the IPCC, acknowledge the value of non-western knowledges. However, either due to a sense of epistemic superiority or helpless “epistemic disconcertment”²¹ (Verran, 2013, p. 144), they do not engage such traditions respectfully. Rather they are viewed extractively as sources of data for analyses within western frameworks (Thomas, 2022) or as perspectives to be integrated into the ‘only real’ knowledge framework (Carmona et al., 2023).

Absent serious engagement with subaltern struggles for equality and epistemic justice, calls for “sustainability transformation” remain hollow. As with development discourse which sought to incorporate culture as though it is a fixed mobilisable resource, sustainability discourses too fail to recognise “culture as emergent in subalternity” (Dutta, 2015, p. 125) or “to start where people are” (Grossberg, n.d., cited in Blaser, 2009, p. 875) to learn from their everyday experiences. Dutta (2015) sees culture as emerging through the everyday resistances and collective practices of subaltern communities, where locally grounded meanings generate alternative visions of development.

The persistence of a post-Enlightenment worldview sustains a mechanistic imaginary of the world. Within this view, the future is a calculable outcome of the right combination of technologies, institutions, and innovations, orchestrated by rational policy-makers and experts. Such futures—solar parks, windfarms, green jobs—are imagined as fixed, universal solutions. This vision is ontologically blind to more modest performances of reality that take the present as real and the future as contingent, indeterminate, and

²¹ The term *epistemic disconcertment* describes the unsettling experience that arises when taken-for-granted assumptions about what counts as knowledge are disrupted, producing doubt and uncertainty. Dominant forms of ignorance often obstruct the perception of such friction, let alone meaningful engagement with it. Verran (2013) argues that disconcertment is a productive force to be engaged with, rather than something to be set aside, domesticated through allegory, or prematurely resolved. Verran, H. (2013). Engagements between disparate knowledge traditions: Toward doing difference generatively and in good faith. In L. Green (Ed.), *Contested Ecologies: Dialogues in the South on Nature and Knowledge*. HSRC Press.

unborn (Jasanoff & Kim, 2015). It also obscures the oppressive conditions of the present, which persist even as elites chase “green” windmills.

Donna Haraway sums up this ontological clash in her inimitable style:

In urgent times, many of us are tempted to address trouble in terms of making an imagined future safe, of stopping something from happening that looms in the future, of clearing away the present and the past in order to make futures for coming generations. Staying with the trouble does not require such a relationship to times called the future. In fact, staying with the trouble requires learning to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings. (Haraway, 2016b, p. 1)

Subaltern environmentalisms set themselves apart precisely by engaging with the real present, rather than an abstracted future, and striving to remedy the present as a precondition to a just future. Studying them offers “essential elements for thinking about the profound cultural and ecological transitions needed to face the inter-related crises of climate, food, energy, poverty, and meaning” (Escobar, 2016, p. 14). Yet despite their centrality, the brutalised and criminalised struggles of the margins remain under-researched, leaving a yawning gap in how we understand both subaltern environmentalisms and the meaning of transformative change.

2.7. Research Questions

There are profound differences in the demographics, ambitions, worldviews, and corresponding theories of change between those pursuing sustainability transformations from solely within convention halls and state capitals and those resisting outside. Barring exceptions, the former are elites backed by hegemonic power, advancing top-down change; the latter are subaltern counterpublics—peasants, fishers, Indigenous peoples, youth, queer groups, and local communities—who engage in breaking and remaking policy from the ground up. While certain reformist actors,

including some nation states and individuals within institutions, may seek to bridge these divides, the structural asymmetries of voice and power remain profound.

The dominant discourses of development, progress, and the management of growth-induced environmental crises through ecological modernisation are pushed by political, financial, and technocratic elite groups that subscribe to Eurocentric rationalities, universal values, global-scale theories of change, and monumental solutions. Subaltern actors—and at times, even nation states from the Global South constrained within global governance regimes—in contrast, rely on plural tactics, diverse epistemologies, incremental gains, and agonistic struggle. Elites favour lobbying and consensus-driven negotiations—albeit among unequal partners—to orchestrate the orderly rollout of solutions; subalterns engage in messy politics to be heard and to prevail against hegemonic forces. The elite gaze is directed towards safeguarding the future; the subaltern fight is for dignity and survival in the present. These orientations yield divergent objectives of transformation: the elite’s future-perfect preoccupations with building sustainable futures, and the subaltern insistence on the present continuous—dismantling unjust presents to keep alive different possibilities and worlds (See Table 2).

If nothing short of transformative change will address the socio-political predicament wrought by centuries of capitalism, colonialism, racism, casteism, and patriarchy, then we must ask: to what extent, in what manner and aided by what processes can each of the two actor groups contribute to such change? And what, in practice, would such transformation look like?

As the preceding review has shown, mainstream policy and transformation studies exhibit a marked elite bias. This bias is evident in their emphasis on enabling innovations, privileging supra-institutions (from international bodies through nation-states to municipalities), and relying exclusively on Western science to define problems and solutions. But what of disruption and agonistic struggle, especially those led by subaltern actors? What if existential questions are better answered through non-Western ways of knowing? What if the problems themselves appear differently when framed from other, non-dominant worldviews? And what if large sections of the world

consider inequality—and the conditions that perpetuate it—not only as a more urgent problem than climate change, but also as one of its root causes?

Table 2

Elite bias in sustainability and policy studies, and the research gap

HEGEMONIC POLICY ACTORS	SUBALTERN POLITICAL ACTORS
THEATRE	
Idealised (Habermasian) public sphere (As-if-equal actors)	Subaltern counter-public sphere + public-at-large (Fraser, 2020)
ONTOLOG(IES)	
Singular reality (Nature-Culture binary)	Plural realities (Relational ontologies)
SCOPE OF CHANGE	
Universal, global	Pluriversal, place-based, local
MODE OF ACTION	
Innovation, elite consensus	Plural tactics, including disruption
TRANSFORMATION OBJECTIVE	
Future perfect (Building sustainable futures)	Present continuous (Unbuilding unjust presents)

Note. Table prepared by the author.

This research contributes to the body of knowledge on crises and transformation by centring the role of subaltern actors and their struggles, and asking:

How do marginalised communities resist erasure, reclaim their environment, and bring about sustainability transformations by articulating alternative visions of both present and future? Specifically, it asks:

1. How do subaltern struggles emerge from the margins to challenge hegemonic processes that deny recognition to their worlds and ways of knowing?
2. How do subaltern struggles for environmental justice define and contribute to transformative change for sustainability? Or, phrased differently: what does

sustainability transformation look like when seen from the perspective of subaltern struggles?

Having outlined the dominant and subaltern framings of sustainability transformations and the research questions that guide this study, the next chapter grounds the inquiry in Ennore, Tamil Nadu. It situates the case within India's global environmental positioning, the state's political history, and the longer trajectories of industrialisation and resistance.

Chapter 3

Locating Ennore: From British to Internal Colonialism

Erasure is never merely a matter of making things disappear: there is always some detritus strewn about in the aftermath. . .some reminder of the violence done to make the world look new again. (Dillon, 2006, n.p.)

The acts of doing and undoing, erasing and resisting erasure, challenge the notion of linear time and the inevitability of progress. Each act is incomplete and transforms the other. Reality is not the product of stable opposites but of assemblages of factors, actors, processes and events that leave traces hidden within the folds of land-, mind- and water-scapes. These imprints remain available to be resurrected to rewrite histories and reimagine futures.

This chapter introduces the Ennore-Pulicat region of northern coastal Tamil Nadu, India, as a palimpsest of struggles over the meaning of land and water by tracing its history since its forced enlistment into “colonial capitalism” (Ince, 2018, p. 13) in the late 18th century. It draws on global, national, regional and local developments to present the assemblage of processes that produced the present and to provide essential context for the case under study²².

Before turning to Ennore, the rationale for this case must be explained. A subaltern struggle against industrialisation of a coastal wetland in Tamil Nadu offers insights into the research questions at hand. I will do this in two parts: first, by situating India and Tamil Nadu as theatres central to global debates on environment, sustainability and transformation; and second, by tracing a historical arc spanning two centuries that culminates in the fishers’ struggle to protect and restore the Ennore wetlands.

²² A substantive analysis relying on archival sources of the nature of erasure during Ennore’s early industrialisation is presented in Chapter 6.

3.1. All Eyes on India

Global attention on India's growth is coloured by unease about its environmental consequences. As the world's most populous nation and a rapidly expanding economy, India's choices are seen as decisive for the planet's future. China is already the largest economy in Purchasing Power Parity terms, and India is projected to overtake the United States for second place by 2030 (Price Waterhouse Coopers, 2015). Commentators, nervously but hopefully, describe the environmental trajectories of these two nations as potential "game-changers" (Mohanty, 2018, n.p.).

On the surface, India's economic rise is impressive. Yet, growth has been uneven, inequitable and environmentally harmful. The three decades following independence in 1947 saw modest annual growth of around 3.5 per cent (Chakraborty, 2018), as India pursued a socialist model of import substitution, self-sufficiency and heavy industrialisation. Inequality shrank under welfare policies rolled out by a big state, despite IMF's pressures in 1966 to liberalise amid currency crisis (Mukherji, 2000). Still, this development came at the expense of vulnerable communities and the lands, waters and forests they relied on: an estimated 21–40 million people, mostly tribal and historically disadvantaged, were displaced during four decades of planned development (Fernandes, 2001; Nayak, 2015).

India resisted neoliberal reforms in the 1980s even as the United States, United Kingdom, New Zealand and even China, under Deng Xiaoping (Harvey, 2005b), liberalised. By 1991, however, a balance of payments crisis and a pro-liberalisation government pushed India into the neoliberalising fold (Mukherji, 1999, as cited in Mukherji, 2000). The transformation was stark: India shifted from a "reluctant pro-capitalist state with socialist ideology to an enthusiastic pro-capitalist state with a neoliberal ideology" (Kohli, 2011, p. 499). Neoliberalism was not the only transformative force at play during this period. Between 1991 and 2025, the character of India decisively changed both economically and politically. The Congress party which had ruled singly or in coalition with other parties was replaced by the Hindu right-wing Bharatiya Janata Party-led National Democratic Alliance in 1998, and then more decisively in 2014, returning to power over two successive general elections since then.

As will be laid out in the sections below, the changes in the political constellation influencing policies at the centre substantially influenced the nature and modes of neoliberal dispossession and accumulation (Nilsen, 2021). These variations notwithstanding, the shrinking state in a country with high poverty levels produced foreseeable consequences. Inequality soared, making India one of the most unequal nations today (Chancel et al., 2022).

3.1.1. Hurting and Saving Environment in Neoliberal India

Neoliberalism extends classic capitalism's reliance on property and enclosure to marketise nature itself, offering "environmental fixes" to sustain accumulation (Castree, 2008, p. 146). India's neoliberal turn coincided with global recognition of capitalism's "second contradiction"—its ecologically destructive pursuit of growth (O'Connor, 1996, cited in Spence, 2000). As discussed in Chapter 2, WCED's report *Our Common Future* (1987) popularised "sustainable development," urging proactive environmental regulation. Having witnessed the Bhopal gas disaster in 1984²³, India enacted the Environmental Protection Act, 1986 (Government of India, 1986) as an umbrella legislation to regulate and mitigate the environmental consequences of industrialisation and development.

Teetering between its identities as a neoliberal state and environmental custodian, India pursued aggressive privatisation and liberalisation on the one hand and advanced environmental regulations on the other. In 1991, it introduced the Coastal Regulation Zone (CRZ) Notification, intended to protect fisherfolk's rights and promote sustainable development along India's 7500 km coastline. Soon after, drawing on Agenda 21 released at the 1992 Rio Summit (United Nations, 1992)—which urged "all countries" to ensure that "relevant decisions are preceded by environmental impact assessments" (Para 7.41(b)), the government issued the Environmental Impact Assessment (EIA)

²³ On 3 December 1984, a poisonous gas leak from American multinational Union Carbide's pesticide factory in Bhopal, India, killed thousands and sickened several hundred thousand people. The scale of the industrial disaster prompted the Government of India to strengthen the environmental regulatory framework by enacting the Environmental Protection Act, 1986.

Notification, 1994²⁴ (Ministry of Environment & Forests, 1994). This law mandated the preparation of an EIA report and prior clearance for a host of industrial and commercial activities. A subsequent amendment added two key safeguards: the mandatory disclosure of EIA reports, and the holding of public consultations prior to project appraisal. These requirements opened new, if limited, spaces for communities to challenge development projects on environmental and social grounds.

Yet these safeguards soon clashed with the imperative to ease business (Sridhar, 2004). The EIA Notification was amended 11 times in just 12 years, each change narrowing its scope or weakening procedural requirements, until it was replaced in 2006 with a version widely criticised as more industry-friendly (Jha-Thakur & Rajvanshi, 2021). The CRZ Notification fared no better: between 1991 and 2003 it was amended 19 times, with each amendment carving out new exemptions for industrial activity in fragile coastal zones (Sridhar et al., 2006). The pattern of dilution continued with the replacement laws of 2011 (Viju, 2010) and again in 2019, both of which significantly weakened protections for coasts and communities.

Though the laws may have intended to depoliticise the decision-making processes by using the “rhetoric of science. . .to legitimise decisions already made for reasons of political expediency” (Bartlett & Kurian, 1999, p. 419), they remained tools for affected communities to “politicise technological decisions” (Koppel, 1988, cited in Bartlett & Kurian, 1999, p. 423) and to frame conflicts as struggles over “fundamental values and visions of social order,” not just technical details (Boggs, 1993, cited in Bartlett & Kurian, 1999, p. 427).

Even the relatively equitable socialist era imposed heavy costs on the environment and the poor. With neoliberalism, these impacts multiplied under the banner of liberalisation, privatisation and globalisation, provoking mass protests by farmers,

²⁴ Though EIA as a tool of environmental decision-making and a strategy to pacify concerns relating to the environmental effects of development predates Agenda 21, the UN’s policy framework was the first to present EIA as an objective to be pursued by all countries as part of the “principles for the provision of environmental infrastructure.” Paragraph 7.41(b) of Agenda 21 reads as follows: “Ensure that relevant decisions are preceded by environmental impact assessments and also take into account the costs of any ecological consequences”.

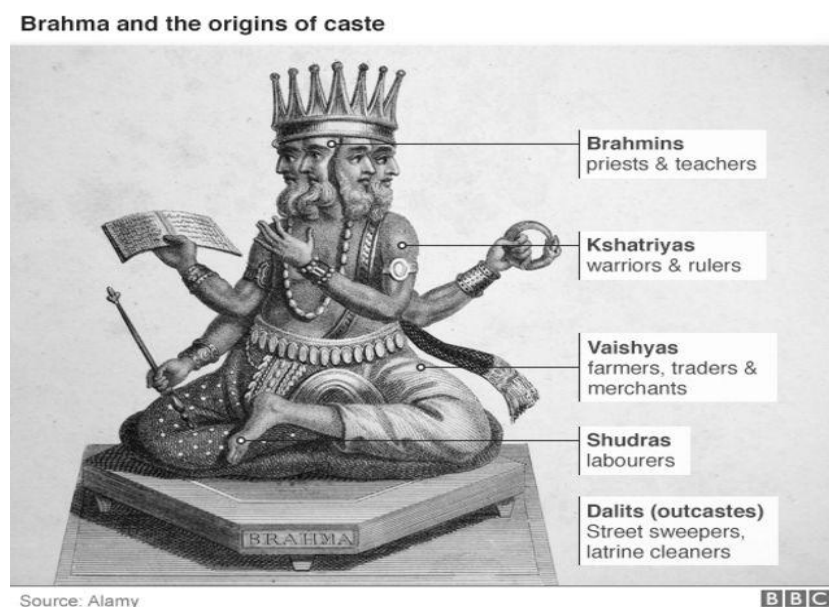
unions and students linked to global movements (Harman & Prasad, 2004). Despite promises of universal development, neoliberalism deepened inequalities along India's structural fault lines.

3.1.1.1. Discrimination with an Indian Flavour

Latour (2005) reminds us that phenomena like neoliberalism are not universal abstractions but locally constituted. In India, the state was already “an important site of maldistribution” (Williams & Mawdsley, 2006, p. 663) even in its developmentalist avatar. Neoliberalism intensified this, especially through land alienation, sparking “thousands of small wars against land acquisitions” (Levien, 2011, cited in Nielsen & Nilsen, 2014, p. 3). Predictably, these conflicts played out through the entrenched logic of caste (Harriss-White, 2014).

Figure 2

Hindu society's caste hierarchy.



Note. From “What is India’s caste system?”, by Unnamed, June 19, 2019, BBC Asia (<https://www.bbc.com/news/world-asia-india-35650616>). Copyright © 2025 BBC.

Caste—a millennia-old system of hereditary hierarchy within Brahmanical Hinduism—divides Hindu society into four varna (social orders): Brahmins (priests, intellectual work), Kshatriyas (warriors/rulers), Vaishyas (traders), and Shudras (manual labourers,

artisans) (Mitchell, 2017). Dalits (Scheduled Castes) and Adivasis (Scheduled Tribes) are outcaste—i.e., they fall outside the four-level caste system and therefore lie below the lowest rungs of the caste ladder.

Casteism, a ritualised practice of discrimination among castes, involves essentialised notions of purity and pollution and is exercised through barriers on occupation, entry, touch and sight. Dalits constitute the formerly untouchable castes; their mere sight and touch were considered polluting. Untouchability and caste discrimination were outlawed by the Constitution, yet caste continues to shape social and economic opportunity (Mitchell, 2017).

3.1.1.2. Caste + Religion: The rise and rise of Modi

Religion is another historic faultline that had lain dormant since the internecine Hindu-Muslim riots during the India-Pakistan partition in the lead-up to the two countries' independence. The Congress party—headed by Jawaharlal Nehru—that assumed power in independent India was influenced by Gandhi's philosophy which preached brotherhood across India's diverse religions—Hinduism, Islam, Sikhism, Buddhism, Jainism and Christianity among others. Of these, Hinduism, the predominant faith in India, with its multitude of philosophies and heterogeneous practices, has even provoked some to wonder if this diversity can be “encapsulated in a single religion or even in religion at all” (Chattopadhyay, 1980, quoted in Basu, 2025, p. 211). Gandhism and the Hindutva ideology promoted by others like Vinayak Damodar Savarkar—that claimed to identify the essential quality of Hinduness (Kanungo, 2015)—pointed to differing and competing nationalist imaginaries (Basu, 2025). One was designed in opposition to western colonialism, with the white coloniser as the other, while the latter was fashioned to establish a Hindu ethnic national identity as different from an internal other—the Muslim and the ‘non-Hindu’.

Nationalist fervour and Gandhism's broad-based appeal prevailed over Hindutva's hegemonic aspirations. However, as Basu (2025) points out, the relevance of Gandhian nationalism faded after the departure of the imperial oppressor; post-independence India was merely a state—a “set of organisational and policy structures” (p. 215)—and not a nation, which is an idea, he observed. As India emerged from centuries of colonial

rule, early leaders like Nehru prioritised public-funded infrastructure and establishment of public sector core industries. Private sector participation in industries was subject to licensing with the state exercising the right to decide which sectors to open up and which to reserve for state sector. Predictably, such discretion resulted in a corruption-riddled governance system ripe for the entrenchment of monopoly capitalism favouring a small clutch of capitalists and a relationship of give-and-take between those corporates, legislators and bureaucrats.

The crony capitalism spawned by the statist license raj—or rule through licenses²⁵—and the absence of a national identity forged around progressive ideals sowed the seeds for the emergence of both the neoliberal era and Hindutva hegemony (Bhattacharya & Thakurta, 2019). The latter sought to collapse the diverse practices and belief systems of the Hindu fold into a universalised Hindu identity based on rigid Brahminical and Sanskritic traditions (Basu, 2025). Its goal, as declared by one of its foremost proponents Savarkar, was to “Hinduise all politics and militarise all Hindudom” (Savarkar, 1923, quoted in Katju, 2011, p. 6)

This consolidation of Hinduism tied to a nation-making project converged with two watershed events in 2002 and 2014; both featured one common actor—Narendra Modi. Before he became Prime Minister, Modi was Chief Minister of the western Indian state of Gujarat. Gujarat’s mercantile ethos that venerated trade as a vehicle of upward mobility through hypergamy blurred caste hierarchies and offered religious distinctions instead as logics of political mobilisation (Dhattiwala, 2025). Indoctrinated in the Rashtriya Swayamsevak Sangh—a Hindu nationalist volunteer organisation inspired by European fascist paramilitary youth organisations from the 1930s (Marzia, 2000)—Chief Minister Modi oversaw, and was accused of enabling, an anti-Muslim genocide (Narain, 2004;

²⁵ License raj is a “derogatory name for the system of regulations governing the private sector in India which were put in place by the 1951 Industries (Development and Regulation) Act as part of the centrally planned industrialisation. Under this system, private operations in the manufacturing sector required an official license” with bureaucrats and legislators having significant discretionary power to decide the sectors that could be opened up for private participation. The process of licensing was dense and complex requiring navigation through multiple departments, exposing entrepreneurs to the whims of the bureaucracy and spawning a culture of rent-seeking and crony capitalism. See entry for “License Raj” in Black, J., Hashimzade, N., & Myles, G. D. (2017). *A dictionary of economics* (5 ed.). Oxford University Press.

Nussbaum, 2015) as it unfolded in his state in 2002. This was the first watershed event: it normalised communal riot as a strategy to polarise society, consolidate a vote bank and turn a professedly liberal democracy into a majoritarian “ethnic democracy”²⁶ (Smootha, n.d., cited in Jaffrelot & Schoch, 2021, p. 155).

The 2002 riots scared away investors crippling Gujarat’s economy to a point where many wondered if it will ever recover (Jaffrelot, 2024). Then began Hindutva’s dance with neoliberal governance. Modi embarked on an ambitious strategy of economic revival that combined aggressive state-led mega-infrastructure expansion with deep pro-market reforms to project Gujarat as an efficient, investment-ready state. Reforms began with the power sector, where farm sector subsidies were curtailed, electricity ‘theft’ was criminalised, and tariffs rationalised, signalling an avowedly “non-populist” approach that privileged fiscal discipline over rural appeasement (Jaffrelot, 2024, p. 128). Electricity provision, once seen as a national good and an entitlement—what Chatterjee (2020) called “fossil developmentalism” (p. 3)—was now re-aligned with “fossil capitalism’s logic of commodification” (p. 7).

Massive investments in highways, industrial corridors, and port infrastructure—often financed through public–private partnerships and global loans—cemented close alliances with big business while aligning the state’s growth model with global capital (Jaffrelot, 2024). Infrastructure and a host of depoliticised enclaves in the form of special economic zones became the spatial engines of both accumulation and Hindutva’s vision of order and progress. Departing from Gujarat’s traditional emphasis on small and medium enterprises, Modi’s emphasis on inviting big investors by offering investment zones with laxer state and democratic control over labour and environmental standards resulted in a crony capitalism that entrenched a class of oligarchs, particularly belonging to wealthy Gujarati families (Jaffrelot, 2024). Notable

²⁶ Jaffrelot (2021) draws on Sammy Smootha who coined the phrase “ethnic democracy” to define it as “the product of ethnic nationalism -- the ideology of a group that considers itself bound by racial, linguistic, religious, or other cultural characteristics and derives from these bonds a strong sense of belonging and often of superiority. Its sense of identity goes along with a rejection of the Other, generally perceived as a threat to the survival and integrity of the ethnic nation” (p. 155).

among them is the multinational conglomerate Adani Group²⁷ which will re-appear later in this thesis.

Liberalisation in the 1990s may have dismantled the cumbersome license-raj controls but not the underlying nexus. Modi's genius lay in rebranding this nexus as virtue. His image as *Vikas Purush*—development man—persisted despite Gujarat model's "growth without development" propelled not by competitive markets but by the selective enrichment of a few conglomerates—Reliance, Essar, Tata, and above all, Adani—through tax exemptions, subsidised land, and favourable regulatory waivers (Jaffrelot, 2024, p. 176). The Gujarat model thus fused neoliberal developmentalism with the politics of Hindutva majoritarianism, where authoritarian centralisation and corporate patronage were presented as the pathway to modernisation.

Modi's strategy was soon scaled up as a national project with the second watershed event. In 2014, the Bharatiya Janata Party under Modi secured a landslide victory in the parliamentary elections marking not only the nationalisation of the Gujarat model but also the consolidation of Hindutva as a hegemonic political project even as it produced a "qualitatively different" cronyism (Basu, 2025, p. 220). Where Congress-era patronage had been dispensed through bureaucratic discretion, the Modi era replaced bureaucratic arbitrariness with political whimsicality. The power to dispense economic favours—ports, airports, highways, and energy projects—was concentrated not in ministries or technocrats but in a handful of political functionaries from the Prime Minister's and Home Minister's home state of Gujarat. The beneficiaries, too, became fewer and more tightly tied to this political core. The emergence of Adani epitomises this shift. Having risen alongside Modi in Gujarat, Adani's business empire expanded in tandem with the BJP's political consolidation (Zeidan, 2025)—acquiring strategic assets in energy, logistics, and defence at unprecedented speed, often through opaque bidding and relaxed oversight.

²⁷ The Adani Group is a Gujarat-based multinational with businesses spanning sea and airport management, electricity generation and transmission, mining, natural gas, food, weapons, and infrastructure.

The transformation of Indian capitalism under Modi illustrates how Hindutva neoliberalism (Nayak, 2025) centralised power, redefined nationalism as development, and normalised the transfer of public wealth to a few chosen corporate allies. The power of his nationalism shielded him and his government even as they gutted labour and environmental laws, undid legal protections for fishers and forest dwellers and attempted to take away what little price protection was available to Indian farmers (Basu, 2025; Dutta & Nielsen, 2021; Jaffrelot, 2024).

If Modi's neoliberalism is a variant of an authoritarian populism, Congress' version was more accommodationist—an “inclusive neoliberalism”—that walked a tightrope between maintaining spaces of accumulation opened up by neoliberalisation and attending to “subaltern groups who are both vulnerable to marginalisation and capable of mobilisation” (Nilsen, 2021, p. 115).

Both the Congress and Modi varieties of neoliberalism blended into the quintessentially Indian logic of discrimination, reinforcing status-based oppression (Harriss-White, 2003, and Piketty, 2020, cited in Kalaiyarasan & Vijayabaskar, 2021) and reproducing inequality (Bhaduri, 2011, as cited in Rao, 2020). Both varieties triggered pitched conflicts across the country—over ecotourism (EJAtlas, 2014g), ports (EJAtlas, 2018a, 2020), wind and solar parks (EJAtlas, 2016a, 2017b), dams (EJAtlas, 2014f, 2015), airports (EJAtlas, 2014a, 2018c), mines (EJAtlas, 2014e, 2016b), steel plants (EJAtlas, 2014i, 2019), expressway (EJAtlas, 2018b), power plants (EJAtlas, 2014b, 2014h) including nuclear power plants (EJAtlas, 2014c, 2016c), and Special Economic Zones (SEZ) (EJAtlas, 2014d, 2014j; Nielsen & Bedi, 2017; Nielsen & Nilsen, 2014).

Meanwhile, Tamil Nadu had been rolling out a different brand of neoliberalism, one that aided accumulation even as the principal political parties that alternatively headed the state government responded to their subaltern constituencies by rolling out social justice and welfare schemes. As will become clear in the following section, Tamil Nadu's model of redistribution was rooted in a political ethos that organically emerged from a counter-hegemonic subaltern movement. Although it was qualitatively different from both the Hindutva and Congress varieties of neoliberalism, Tamil Nadu's model

did little to either stave off subaltern resistance or change its essentially exploitative neoliberal character.

3.2. Dravidian Neoliberalism

Owing to specific historical trajectories, the state mobilised depressed castes and classes within a broader sub-national Dravidian-Tamil identity²⁸ that challenged caste hierarchy and domination in cultural and economic life. Under this banner, successive governments pushed a dual programme: development through industrialisation-led growth and social justice via redistribution and affirmative action. Now widely described as the Dravidian model (Kalaiyarasan & Vijayabaskar, 2021), this style of development—high growth combined with human development—has been credited with making Tamil Nadu resemble a developed economy (Kochhar et al., 2006, cited in Kalaiyarasan & Vijayabaskar, 2021). Poverty reduction, particularly among depressed castes, has been striking: in the two decades after neoliberal reforms began, poverty among Scheduled Castes (Dalits) fell from 66 per cent to 12.7 per cent (Kalaiyarasan & Vijayabaskar, 2021, p. 19). To understand the “Dravidian model” more critically, and to contextualise the case study of Ennore introduced later, it is necessary to sketch the historical construction of Dravidian-Tamil identity and the role of colonial governmentalities and politics in shaping its shifting meanings.²⁹

3.2.1. South India: Setting the Stage

When the English East India Company (EIC) first arrived on the Coromandel coast in the early 17th century C.E., southeastern India was a patchwork of fading empires, kingdoms and principalities (Sastri & Champakalakshmi, 2017). The Coromandel—a corruption of *Chola-mandalam* or territory of the Chola empire—already had a long

²⁸ Dravidian is a term used to refer to people belonging to south Indian linguistic groups of Tamil, Malayalam, Kannada and Telugu. These belong to the Dravidian family of languages as distinct from the Indo-Aryan stream. Dravidian identity, underpinned by linguistic and cultural pride, was and continues to be mobilised as a counter-hegemonic force against the universalising tendencies of North Indian hegemony, particularly those of Brahmanical Hinduism and Hindi language.

²⁹ To trace the historical trajectory of the Dravidian movement, I draw liberally from the history of Dravidian politics in: Krishnan, R. K., Sriramachandran, R., & Subagunarajan, V. M. S. (2022). *Rule of the Commoner: DMK and the Formations of the Political in Tamil Nadu, 1949-1967*. Cambridge University Press.

maritime history and was integrated into trade networks with the Arab world and Southeast Asia (Seshan, 2012).

Its ports, though lacking natural advantages like deep harbours, drew wealth from a productive hinterland and skilled cotton weavers whose fabrics supplied Europe's growing markets (Seshan, 2012). Pulicat harbour was a Dutch monopoly; Fort St. George and the Madras port in Chennai were the English EIC's headquarters; San Thome, a modest Portuguese seaside settlement also in Chennai, was later ceded to the British; Pondicherry port and town, a 100 km further south, remained French.

By the mid-18th century, the Dutch were in decline, and the British and the English EIC were consolidating power after the Mughal empire's decisive defeat at the 1765 Battle of Buxar (Bunting, 2024). Over time, Company rule—and later the Crown—extended across what became the Madras presidency, covering significant parts of the present-day southern Indian states of Tamil Nadu, Andhra Pradesh, Kerala, Telangana and Karnataka. Separated by the Vindhya hill ranges stretching west to east across the Indian subcontinent's mid-riff, north and south India had distinctive ethnic characteristics.

This north-south distinction became central to the emergence of the Dravidian identity. Nineteenth-century scholarship distinguished the south Indian 'Dravidian'³⁰ languages (Tamil, Telugu, Kannada and Malayalam) as pre-dating Sanskrit-derived north Indian languages, attributing the divergence to migrations of Indo-Aryan settlers from the Central Asian steppes between 2000 and 1500 B.C.E. (Parpola, 2015). Excavations of the Indus valley civilisation in modern-day Pakistan and northwestern India with links to contemporary settlements in Keezhadi and Adichanallur in Tamil Nadu (Etter, 2020) lent weight to the idea of a pre-Aryan Dravidian people displaced southwards (Krishnan et al., 2022).

³⁰ Dravidian was a term used by Robert Caldwell in his pioneering publication titled "Comparative Grammar of the Dravidian or South-Indian Family of Languages" (1856) to describe a family of languages prevalent in the South. He borrowed the word from the Sanskrit word *Dravida* used to refer to the Tamil and related languages and peoples (See Parpola, 2015).

Another distinctive feature of southern India was the near absence of two of the four Varnas, Kshatriyas and Vaisyas (Chandel, 2018; Hardgrave, 2022; Irschick, 1969; Jaffrelot, 2000). “So all castes are either Brahmin, Suddhra or Untouchable” (Barnett, 1976, p. 16).³¹ This sharpened the viability of a subaltern mobilisation of non-Brahmins against a Brahmin elite.

When the British Crown assumed administration, they faced difficulties adjudicating personal law in a land of countless traditions. Thanks to the Mughals who had left behind a coherent code for Muslims, Muslim personal law had coherence, but the beliefs that were not Muslim, Jain, Sikh, Buddhist or Christian—and even these were by no means homogenous—were too diverse for ‘rational’ governance. The British clubbed all these under a Hindu personal law grounded in Sanskrit Dharma Shastras (code of ethical, legal and religious principles) interpreted by Brahmin pundits (priests) for colonial courts. This excluded oral and vernacular traditions, including Tamil devotional texts distinct from Sanskrit ‘Hinduism’ (Krishnan et al., 2022).

The arbitrariness of these constructions was evident in British India’s first nationwide census in 1881, which admitted:

The greatest ignorance prevailed on the subject of religion, also frequent indifference and great prejudice, the latter especially, among the Census agency. Many could not tell whether they belonged to any particular religion. The Census agency not only made entries at variable discretion in such cases, but they carried preconceived notions to the extent even of dispensing with the formality of inquiry and rejecting replies given (Government of India, 1883, p. 17).

This census practice, along with codified Hindu law, had lasting consequences for peninsular traditions, many of which were subsumed without consent into a homogenised ‘Hinduism’.

³¹ For those interested in understanding South India and Tamil Nadu’s contemporary cultural history, Barnett (1976) is a useful resource. Barnett, M. R. (1976). *The politics of cultural nationalism in South India*. Princeton University Press.

3.2.2. Birth of a Dravidian Era

Meanwhile, in the Madras Presidency, this “discursive construction of a unified Hinduism. . .centralising Brahmins and Sanskrit” provoked resentment among non-Brahmin communities (Krishnan et al., 2022, p. 21). Brahmins, advantaged by early access to English education, dominated colonial administration. This added fuel to the fire. The 1881 caste census enabled the formation new caste associations and advocacy groups, led by non-Brahmin elites from trading and land-owning classes, to demand redress for discrimination (Krishnan et al., 2022).

Here the contours of a Dravidian-Tamil-South Indian identity against a North Indian-Aryan-Sanskrit/Hindi other began to take shape as a Dravidian cultural movement between the late 19th and mid-20th centuries. Early Dravidian public intellectuals were explicitly anti-nationalist, fearing the Indian freedom struggle—dominated by Brahmin leaders of the Congress—would perpetuate northern hegemony. When nationalists circulated ‘Mother India’ maps, Tamils countered with Tamil Thaaai maps personifying Tamil—the language—as mother (Thaaai) and goddess (Ramaswamy, 2001, p. 108).³²

The South Indian Liberal Federation (Justice Party), formed in 1916, sought proportional representation in education and employment for all castes, though in practice it primarily advanced the interests of the Shudra elite (Krishnan et al., 2022, p. 35). As Justice Party, the Federation also successfully contested elections in the Madras Presidency after the introduction of dyarchy or dual government rule in 1920. But the radical stream of the Dravidian movement emerged forcefully only after the entry of Erode Venkatappa Ramasamy, an iconoclast, intellectual and reformer who is revered as Periyar or ‘Respected Elder’ in Tamil Nadu. The Self-Respect Movement that he led “stood as the exact antithesis of the Justice Party” (Krishnan et al., 2022, pp., p. 36). It

³² The Dravidian movement began with a pan-South Indian framing designed to bring together non-Aryan linguistic groups as a block against north India’s Hindi-Brahmin hegemony. However, throughout its intellectual and political campaign phases, the movement was driven by and drew its support and cultural references from Tamil. Tamil language, identity and pride became central to the political mobilisations in early 20th century. See Krishnan, R. K., Sriramachandran, R., & Subagunarajan, V. M. S. (2022). *Rule of the Commoner: DMK and the Formations of the Political in Tamil Nadu, 1949-1967*. Cambridge University Press.

saw in the Tamil language and the Dravidian identity the necessary political ingredients for a “counter hegemonic agonist movement” aimed at fostering a republican spirit to thwart North Indian Aryan-Brahmin domination (Krishnan et al., 2022, p. 24). After initially maintaining a distance with the Justice Party owing to the non-Brahmin elite at its helm, Periyar eventually joined and rose to prominence with the Party and merged the party into the Self-Respect Movement.

Blinded to the vast cultural differences across India by their nationalist fervour, the Congress thought it was laying the groundwork for uniting India with a common language when it decided to introduce Hindi in schools in the Madras Presidency after ousting the Justice Party to form the regional government in 1937. That was the spark that triggered the Dravidian boom. Inspired by Periyar’s conceptual clarity linking language, Dravidian identity and emancipatory politics, a host of caste organisations and groups identifying with Dravidianism mounted a powerful drawn-out anti-Hindi agitation linking language to emancipation and separatism (Krishnan et al., 2022), drawing in new, young activists who would decisively shape the future of Dravidian politics.

3.2.3. Anti-Hindi Protests and the Rise of Dravidian Electoral Politics

C.N. Annadurai, drawn to the Dravidian cause, joined Periyar’s ranks in 1934, rose to prominence during the 1938 anti-Hindi agitations, and became his trusted lieutenant. Annadurai—referred to in kinship terms as Anna (elder brother) and Arignar (knowledgeable one)—set about transforming the Justice Party’s elitist character. He purged it of conservative non-Brahmin elites and recast it as the Dravida Kazhagam, a party claiming to represent the interests of all backward castes (Barnett, 2015).

Annadurai diverged from his mentor on crucial aspects. Periyar abhorred office, and saw no relevance for the movement in electoral politics, and focused instead on the “propagation of critical and agonistic formulations” (Krishnan et al., 2022, p. 4). Annadurai, by contrast, wanted to build a mass organisation capable of contesting elections, and carving out space for self-governance.

In 1949, two years after independence, Annadurai parted ways with Periyar and founded the Dravida Munnetra Kazhagam (DMK). The new party espoused social justice and the emancipation of Dravidians, and articulated a vision for either an independent Dravida Nadu or a federation of South Indian states. Among those who joined him was M. Karunanidhi, then just 25, who had already entered public life at age 14 by leading school protests during the 1938 anti-Hindi agitation.

Contesting elections for the Madras legislature was a formidable task for this start-up party of young, though struggle-seasoned activists. They faced a powerful national party with vast resources and the experience of political elders. Yet as Krishnan et al. (2022) note, Annadurai succeeded in turning Dravidian ideals into political common sense to mobilise a subaltern Tamil bloc against an entrenched social order.

The anti-Hindi agitations of 1965 marked a turning point. Protests erupted against Article 17 of the Constitution, which designated Hindi as the sole official language. By February, the movement had snowballed into widespread demonstrations and violence. Although the DMK played a role, the agitation quickly acquired a momentum of its own as students entered the struggle with an uncompromising demand for abrogation of Article 17.

Encouraged by pro-Hindi zealots, both the Union Government and the Congress-ruled Madras State government responded with repression. Police violence left scores injured and several dead. With blood already spilled and the situation spiralling, Annadurai and other DMK leaders eventually persuaded students to suspend their strike, bringing relief to a state on edge (For a detailed account, see Krishnan, 2022, chapter titled "The Eruption." pp. 217-238).

Congress had fatally misjudged the intensity of Tamil opposition to Hindi imposition. In the 1967 state assembly elections, the DMK rode a wave of popular resentment to a landslide victory. This watershed moment marked the beginning of the Dravidian era and the end of national party dominance in Tamil Nadu. From 1967 to 2024, the state has been governed almost continuously by either the DMK or its breakaway faction, the All India Anna DMK (AIADMK), and their allies. National parties like Congress and the

Bharatiya Janata Party—viewed as northern and alien to Tamil identity—have made little headway in the state ever since.

3.2.4. Social Justice versus Accumulation

True to their founding promise of social justice through affirmative action and economic redistribution, the Dravidian parties implemented wide-ranging welfare schemes. These targeted maternal and child health, education, modernisation of the caste-ridden agrarian sector and employment through aggressive industrialisation. They benefited from building on an economy that was already relatively industrialised or had major projects in the pipeline.³³

Earlier, I referred to Kalaiyaran and Vijayabaskar's (2021) *The Dravidian Model: Interpreting the Political Economy of Tamil Nadu*. Written at time when India's plural society was under threat from authoritarianism and Hindu majoritarian currents, the book and its very title offered a counter-hegemonic trope. It presented evidence that a justice-centred growth model could challenge economic growth's reputation as exclusionary and tilted toward elite accumulation.

However, distribution and accumulation did not happen without dispossession, nor did all castes benefit equally. Critiques argue that Kalaiyaran and Vijayabaskar (2021) overstate their case and omit significant fault lines. Without denying the achievements of the 1970s and 1980s, Heyer (2022) notes that much of the benefit accrued to non-Brahmin Other Backward Classes (OBC)—the Shudra elite—rather than the Dalit Scheduled Castes.

These contradictions deepened with liberalisation. Kalaiyaran and Vijayabaskar (2021) themselves concede that states were incentivised to compete for global capital through “tax concessions, low-cost land, labour and infrastructure” (p. 224), while

³³ When DMK formed the government in 1967, Madras state (now Tamil Nadu) already had a significant industrial base, including Public Sector Units Bharat Heavy Electricals Ltd, Integral Coach Factory and Heavy Vehicle Factory, and private companies including Hindustan Photo Films and vehicle manufacturers Ashok Leyland and Standard Motors. Other significant core sector industries including Madras Refineries Ltd, Ennore Thermal Power Station, a second major port in Thoothukudi and the Salem Steel Plant had already been approved under various 5-year plans by the Union Government.

facing “compulsions to use frontier technologies, lower labour and environmental standards” (p. 225). Curiously, however, they do not examine the implications of cheapening land, labour and nature (Patel & Moore, 2017) for Dravidian ideals of social justice and equality. Even when acknowledging that “[t]hree of the largest state-level protests in recent years have been around issues of ecology and livelihoods,” they treat these as a “new set of demands” born of rising aspirations, rather than probing their deeper structural significance (Kalaiyarasan & Vijayabaskar, 2021, p. 228).

This omission is stark. Tamil Nadu’s post-1990s growth was driven by large-scale land alienation, ecological degradation and land-use change; predictably, this produced conflict between land-users—both landed and landless—and the state-corporate nexus. Acting as a land-broker for private investors, the neoliberal state was able to coax owners to part with their lands for substantial sums with relatively little resistance (Vijayabaskar, 2014).

Resistance came largely from landless fishers, peasants and Dalits, whose struggles—such as against land alienation for Michelin’s Special Economic Zone at Thervoy Kandigai or against the desalination plant at Nemmelikuppam—were crushed with police power (EJAtlas, 2014j, 2021). The state has not hesitated to wield lethal force: the anti-pollution protests against Vedanta’s copper smelter in Thoothukudi, where 14 people were killed in 2018 (EJAtlas, 2022), and the crackdown on anti-nuclear protestors at Koodankulam in 2012–2013 are stark reminders (EJAtlas, 2016c).

Tamil Nadu is arguably India’s most politically restive state (Narasimhan, 2018). Over the past two decades, mobilisations by agrarian and fisher communities have generated broad-based support to challenge nuclear power plants (EJAtlas, 2016c), shut down polluting industries (EJAtlas, 2022), block power plants (EJAtlas, 2014b), expressways (EJAtlas, 2018b), seaports (EJAtlas, 2018a, 2020) and oil and gas projects (EJAtlas, 2017a). Such popular support has influenced electoral agendas and forced perceptible, though reluctant, shifts in political narratives about land and prosperity (Jayaraman, 2021b), even as they expose faultlines in the Dravidian populist compact (Geetha, 2024).

These mobilisations resonate with earlier Dravidian battles to disrupt hegemonic narratives. However, they also reveal new tensions. The discursive battles waged by Dravidian ideologues disturbed the epistemically exclusive discourse of Indian nationalism. They challenged its homogenising narrative of a pan-Indian civilisation and mobilised counter-histories to recover silenced knowledges. In Foucaultian terms, the movement gave voice to the “constitutive silences” (Medina, 2011, p. 16) that underpinned nationalist discourse by returning to its “non-accidental omission(s)” (Foucault, 1977, pp. 134-135).

Yet, like any counter-hegemonic project without adequate reflexivity, the Dravidian movement has produced new exclusions as part of “new hegemonies” (Medina, 2011, p. 21). The only antidote to this is to ensure “constant epistemic friction of knowledges from below” (Medina, 2011, p. 21)—a condition rarely sustained outside radical and reflexive movements. In Tamil Nadu, epistemic friction must emerge at great risk to those asserting marginalised knowledges.

Against this backdrop, Tamil Nadu is a revealing site to explore transformative change. Its environmental justice struggles confront a state that proclaims a cultural commitment to social justice and equality, yet aggressively pursues neoliberal capitalism built on alienation, dispossession and discrimination. The Ennore–Pulicat wetlands, and the long-silenced struggles of their fisher communities, provide a lens to examine the discontinuities in the Dravidian narrative.

3.3. Knowledge Gaps and Opportunities

The Ennore-Pulicat wetlands are an apt site for additional reasons. Scholarship on subaltern EJ struggles in India remains sparse, especially in urban contexts. What exists suffers from a marked rural and terrestrial bias, with a focus on dams (Baviskar, 2019; Dukpa et al., 2018; Joshi, 2015; Routledge, 2003; Shah et al., 2021; Swain, 1997; Williams & Mawdsley, 2006), forests (Davidsdottir, 2021; Jewitt, 2000; Tyagi & Das, 2020; Williams & Mawdsley, 2006) and rural land (Guha, 2002; Nielsen & Bedi, 2017; Oskarsson, 2013). A few exceptions—Ranganathan’s (2022a, 2022b) work on the political ecology of caste in Bengaluru, Baviskar’s (2020) on Delhi and Parthasarathy

and Chouhan (2020) and Movik et al.'s (2023) studies on contested coastal commons of Mumbai—demonstrate the value of urban political ecology.

India's 7500 km coastline sustains millions of fishers, including in coastal metropolises. Yet, coastal EJ struggles remain underexamined. Liminal spaces are frequent sites of conflict, pitting fishers against real estate, industry, ports and tourism (Kurien, 2020). Academic engagement with these political processes is limited. I identified only two exceptions to the terrestrial bias: one on resistance to a proposed coal plant in Andhra Pradesh (Jahnavi & Satpathy, 2022), and another on climate adaptation and conservation politics in the Sundarbans (Ghosh, 2018). By focusing on a subaltern urban coastal struggle, this research addresses multiple lacunae in the literature.

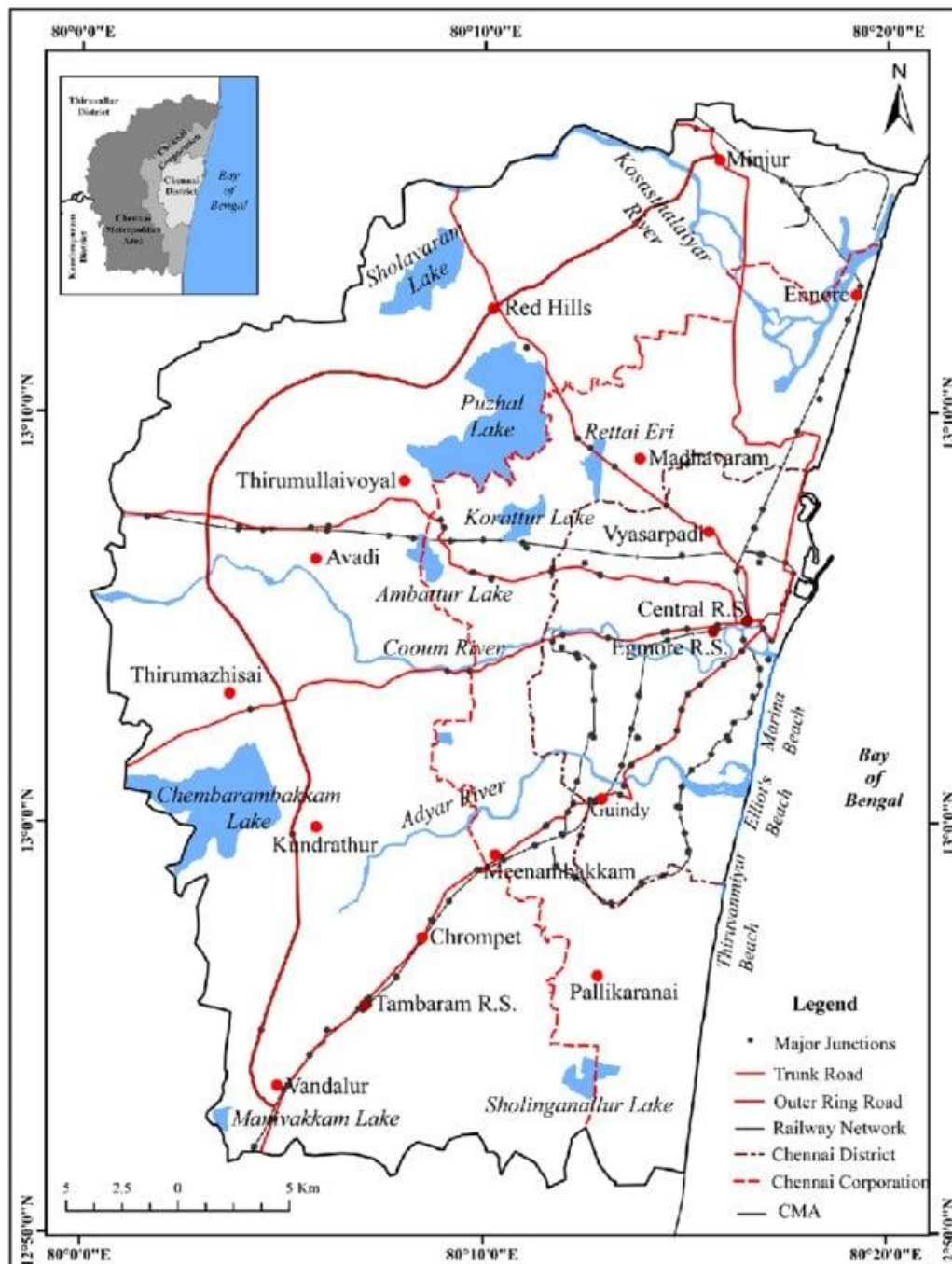
3.4. The Ennore-Pulicat Wetlands and its People

Ennore lies within the Chennai metropolitan region (See Figure 3). North Chennai, where it is located, is predominantly working-class with a high proportion of marginalised castes: Scheduled Castes (Dalits), Scheduled Tribes and Most Backward Classes (MBC)³⁴ constitute 37 per cent of the population (TANGEDCO, 2019). Predictably, this region hosts southern India's densest concentration of polluting industries: a 10.5 million tonne per annum petroleum refinery, 34 large petrochemical industries, three ports with their associated truck traffic, 3.3 gigawatts of coal-fired power, coal yards and ash dykes, petroleum storage tanks and the city's largest garbage dumping yard—altogether pressing against residential settlements of more than 1 million people (Jayaraman, 2020; Jayaraman et al., 2024). This dense concentration of carbon-intensive industries has been described as an instance of “fossil neoliberalism” (Kumar, 2022, p. 1853).

³⁴ Most Backward Classes refers to caste groups within Tamil Nadu government's system of social classification who are more marginalised than the general Backward Classes, which includes the Shudra elite, but not as marginalised as the outcaste groups – Scheduled Castes (Dalits) and Tribes (Adivasis). This classification is used by the government for affirmative action.

Figure 3

Chennai metropolitan area based on Chennai Masterplan 2006-2026



Note. From *Comparison of Urban Growth Modeling Using Deep Belief and Neural Network Based Cellular Automata Model—A Case Study of Chennai Metropolitan Area, Tamil Nadu, India*, by A. A. Devendran and colleagues, 2019, *Journal of Geographic Information System*, 11(1), pp. 1–16 (<https://doi.org/10.4236/jgis.2019.111001>). CC BY 4.0.

The transformation of Ennore cannot be understood in isolation from Chennai's processes of urbanisation. Rather than a bounded city, Chennai operates as an extended field of urbanisation whose metabolic demands—land, water, energy, and waste sinks—are displaced onto regions such as Ennore through uneven and shifting relations of extraction and servicing. This spatial relationship is fundamentally political, as the costs of urban-industrial growth are externalised onto historically marginalised communities and ecologies.

The wetlands, the dune-studded Kattupalli island and the sandy, surf-pounded coastline that make up the watery *Neythal* landscape³⁵ of Ennore, are a mosaic of biodiverse habitats that support varied livelihoods, cultures and identities.

Tolkāppiyam, the oldest extant Tamil literary work describes the *Neythal* as a “sandy world for Varunan [the sea god] to roam” (*Varuṇan mēya perumaṇal ulagam*), (Nadarajah, 1994; Tolkāppiyar, 300 BCE-500 CE). *Neythal* commons, categorised as *poromboke*³⁶ in revenue records, have historically supported traditional occupations—such as fishing, shell-gathering, agriculture, animal husbandry, and palmyra-based artisanal crafts.

Ennore's tidal wetlands sprawl from the petroleum refinery in Manali northwards past thermal power plants and coal yards to merge with the Pulicat lagoon, India's second-largest brackish water body. Locals name its varied habitats: *aaru* (river), *kadarkazhi* (river mouth), *paraival* (backwaters), *sathuppu* (marsh), *thittu* (islets), *alaiyaathi* (mangroves) or *uppalam* and *uppankazhi* (salt pans and salt marshes). A narrow barrier island, topped with palmyra and cashew, shelters dunes that support dense groves of fig, java plum and banyan. These waterlands are characterised by fluidity: binary-

³⁵ Tamil Sangam era (300 BCE to 300 CE) literature describes five distinct landscapes (*Ain thinai*)—*Kurinji* (mountainous), *Mullai* (forests and pasture), *Marutham* (agricultural plains), *Neythal* (coastal/littoral) and *Paalai* (arid lands)—associated with different emotions, ecologies, seasons, deities and ways of living.

³⁶ *Poromboke* is a medieval Tamil language word denoting communally held and unassessed commons, including waterbodies, grazing grounds, wood lots, roads and fair grounds. *Poromboke* commons cannot be built upon or traded.

defying liminal spaces that are neither water nor land; sometimes water, sometimes land.

Four main communities inhabit the region: Pattinavar (dominant sea-fishing caste), Sembadavar or Paruvatharajakulam (inland fishers), Irular (a tribal community partly reliant on casual urban labour), and Dalits from historically untouchable castes. The Pattinavar and Sembadavar are officially classified as Most Backward Classes (Department of Backward Classes and Most Backward Classes and Minorities Welfare, n.d.), while the latter two are grouped under Scheduled Tribes and Scheduled Castes respectively.

Fishing here requires a bodily submission to the slow-moving waters and the soft, yielding mud. Men and women spend hours wading, diving and handpicking fish. They are “the quintessentially littoral people” (Pearson, 2006, p. 360), amphibious beings of the *Neythal samoogam* or *Neythal* society (V. Konstantine, personal communication, August 24, 2024) who “move easily between land and sea” (Pearson, 2006, p. 354).

3.4.1. Ennore’s Location Curse

Terraforming (*noun*)

/ˈtɛrəfɔːmɪŋ/

the modification of the environment of a world, especially to allow it to support life-forms alien to it. (Prucher, 2007)

Amitav Ghosh’s (2021) *The Nutmeg’s Curse: Parable for a Planet in Crisis* describes colonial terraforming of Indonesia’s Banda Islands as ecological remoulding designed to yield value to colonisers—an insidious “slow violence”³⁷ (Nixon, 2011) that annihilated species and reordered landscapes, often viewed in pejorative terms (Briand, 2024, n.p.). While Banda Islands suffered a resource curse (Auty, 2002; Sachs & Warner, 1995), Ennore-Pulicat’s predicament is a ‘location curse.’ Its location at the littoral edge of the Bay of Bengal, with access to a vast hinterland, has made it a target of extractive

³⁷ The violent, genocidal campaigns associated with the early colonisation of the Banda Islands were anything but slow. Ghosh’s reference to “slow violence” instead points to how the islands were landscaped and refashioned to extract, process, and ship nutmeg to imperial cities – a transformation that violently compromised the bases for all earlier forms of living with the land.

forces since at least the 16th century. Pulicat thrived as a Vijayanagara-era port, with textiles shipped to Southeast Asia and Europe, its streets filled with Tamil, Telugu, Portuguese and Arab traders (Subrahmanyam, 2002, p. 96).

Pulicat's decline coincided with the rise of Madras (now Chennai), founded in 1639 when the English East India Company established Fort St. George. Madras cloth—a calico produced locally—was exchanged in Southeast Asia for nutmeg and spices coveted in Europe. Chennai's birth set the stage for three waves of Ennore's terraforming: salt industrialisation (late 18th to mid-20th century), “fossil developmentalism” in post-independence India (Chatterjee, 2020, p. 3) and ports-led “planetary urbanisation” under liberalisation (Brenner, 2018, p. 570).

3.4.2. The First Wave: For the Love of Salt³⁸

Salt both built and broke the British empire's hold over India. In 1805, the East India Company imposed a salt monopoly in Madras Presidency, extending a policy already successfully enforced in Bengal (Crawford, 1830). Taxing a universal necessity proved incendiary, ultimately feeding into Gandhi's 1930 Salt March (Weber, 2002). But long before that, the monopoly enclosed and transformed Ennore's wetlands.

Salt is ubiquitous in Ennore's natural saltscape—present in the water, air, soil and halophytic plants. Alongside fishing, farming, and cattle-rearing, the saline water-lands had also supported artisanal salt making (Kamaladevi, 2000). The Company industrialised this system: dividing commons into policed salt factories, digging canals and standardising production. Salt water from the backwaters was channelled into shallow solar evaporation ponds called *Kondum*. After partial evaporation, the concentrated brine was moved into smaller pans (*paathy*), where under the heat of the sun and earth it crystallised into salt, harvested with wooden scrapers.

Compared to the produce from other salt-producing regions, the salt from Ennore's backwaters was judged by the British as being of “acceptable quality” (Government of

³⁸ A detailed discussion of the mode of erasures effected by salt industrialisation and fossil developmentalism is presented in Chapter 6 using documents sourced from the Tamil Nadu State Archives.

India, 1878, p. 178); that was unfortunate, as it signalled the replacement of artisanal methods with an industrial-capitalist monoculture. This system required intense disciplining of soil, water, tides, labour and markets. The EIC and later the Crown built an assemblage of bureaucracy, pricing, policing, quality control and storage and transportation infrastructures to align the local productivity with colonial interests.

The wetlands were radically transformed. An unbroken patchwork of commons was reconfigured into chequered, enclosed salt-producing blocks—Kattur, Athipattu, Voyalur, Vallur and others—each heavily policed. New canals enabled inflows of water and outflow of salt-laden boats. By the mid-20th century, 3,141.64 acres of Ennore’s wetlands had been converted into salt pans (Government of Tamil Nadu, 1968, p. 32). As with other monocultures, the environment turned hostile to life that did not aid salt production. Metabolically, though, production still resembled agriculture: the sun, tides and human labour provided the primary energy. Salt cultivation was seasonal, confined to January–September; each monsoon or cyclone obliterated the pans, demanding their repair before work resumed.

Labour relations mirrored agrarian patterns of hereditary bondage and slavery. The British “perpetuated conditions of dominant caste hegemony over labour relations in the salt industry” (Arularasan et al., 2023, p. 869). Salt farms, owned or leased by dominant castes (Mudaliar, Pillai, Brahmin), relied on underpaid, unprotected Dalit labourers exposed daily to salt and sun. Conditions remain largely unchanged in the few surviving salt pans at Kattur. One elderly worker from Athipattu recalled:

We would wake up by 4 in the morning and work in the salt pans until 9 or 10 a.m. On hot days, our skin would get caked in salt. We would work barefoot. Workers today wear socks to protect their feet. Our feet would get scratched and the wounds would fester. To heal the wounds, we would apply turmeric powder over the wounds and dip our feet in rice *kanji* water. That would give us some comfort while working the next day. The wages were Rs.5 per day. (Interview dated 28 May 2023, in Bremner et al., 2024)

Salt enclosures excluded other users—grazers, seasonal fishers, landless cultivators—sometimes violently. A 1942 clash between coastal watchers and Ennore villagers, triggered by interference with fishing, escalated when a colonial patrol opened fire, killing one woman and injuring four others (Government of India, 1942a, pp 131-132).

Yet local memories are ambivalent. Several fishers recall salt workers in kinship terms and describe barter economies of fish for salt (as cited in 221210_Fishers_Kattukuppam.docx in Bremner et al., 2024). They described how mangrove-fringed canals criss-crossing the salt pans served as breeding grounds for fish and prawns. Salt production also sustained boat builders, cargo operators, shell gatherers supplying lime kilns, and farmers and plantation owners using the waterways to transport produce to Madras.

The salt monopoly was abolished in 1947. Labour conditions improved slightly, but caste hierarchies remained intact (Arularasan et al., 2023); bonded labour was legally abolished only in 1976. The legacies of salt, colonialism, and capitalism, however, persisted, mutating into postcolonial developmentalism. From being one of many sites of Euro-colonial extraction, Ennore became an urban sacrifice zone and remains marked by internal colonialism and environmental casteism in contemporary India (Jayaraman, 2022).

3.4.3. The Second Wave: Fossil Developmentalism

During the colonial era, electricity was deployed as one of the “tools of empire” (Headrick, 1981, cited in Rao & Lourdusamy, 2010, p. 29), consolidating power and transferring wealth to a narrow capitalist elite. At independence in 1947, India—then a nation of 340 million—had only 1,362 megawatts (MW) of installed capacity (Chatterjee, 2020).

Post-independence, this changed dramatically. A welfare-oriented state pursued the “democratisation of consumption” as a pathway to “long-anticipated social justice” (Chakrabarty, 2014, cited in Chatterjee, 2020, p. 16). Electricity, reframed as a public good, became a counter-capitalist “de-commodity.” Grid expansion in post-war Asia disrupted the neat association between Euro-colonialism and fossil capitalism’s logic

of commodification, embedding electricity instead within nation-building and the logic of fossil developmentalism (Chatterjee, 2020).

Universal electrification, agrarian modernisation, and import substitution and self-sufficiency in core sectors of steel, cement, hydrocarbons and fertiliser created a formidable demand base. The electricity sector expanded rapidly through large centralised hydel and coal-based power projects. The burden of development fell heavily on the poor, whom Prime Minister Nehru admonished that “if you are to suffer, you should suffer in the interest of this country” (Klingensmith, 2007, cited in Chatterjee, 2020, p. 14). Between 1951 and 1990, such projects displaced or otherwise affected 21–40 million people, over 60 per cent of them Dalits and Adivasi people (Fernandes, 2001).

If fossil-fuelled steam propelled Euro-colonialism and fossil capitalism, it was fossil-fuelled electricity that underpinned fossil developmentalism through internal colonialism in newly independent states like India. While the rhetoric shifted from profit to progress, the colonial logic of control over land, labour and knowledge persisted and gained legitimacy as development’s unavoidable collateral.

For Ennore, this second wave brought transformation on a scale far greater than salt industrialisation. By the time the DMK broke two decades of Congress rule and began the Dravidian era in 1967, foundations for fossil industrialisation had been laid: a petroleum refinery, two fertiliser plants and a coal-fired power station were already planned. By the mid-1990s, the first stage of the state electricity board’s North Madras Thermal Power Station was commissioned and work to establish units for the second stage had commenced (National Thermal Power Corporation, 1995). Today, Ennore hosts southern India’s densest concentration of coal-fired plants and fossil industries. Of Tamil Nadu’s 7,795 MW of public-sector coal capacity, 3,330 MW lies within or adjacent to Ennore’s wetlands (Central Electricity Authority, 2023, p. 44).

Where salt industrialisation dispossessed through enclosure, fossil developmentalism dispossessed through degradation and pollution. Oil leaks from the refinery, hot water and coal ash from the power plants, and frequent chemical emissions from fertiliser

plants triggered repeated conflicts with salt workers, fishers, farmers and residents. Yet early industrialisation also offered secure employment for many, including some locals. Fishers, however, largely stayed away, preferring to meet their needs by fishing in the river and the sea.

The neoliberal reforms of the 1990s brought a harsher phase of jobless growth. Wetlands once used for salt were converted into industrial real estate. Displaced salt workers and fishers, their livelihoods and health impaired by coal dust, oil and ash, swelled the ranks of insecure contract labour competing with out-of-state migrants. Ennore's air was declared unfit to breathe (The Coastal Resource Centre, 2016b), and the region grew prone to industrial accidents.

Twin industrial disasters in December 2023—a major oil spill from the refinery and a toxic gas leak from a chemical factory—prompted an anguished testimony at a citizen-led hearing:

The Ennore I remember was a beautiful, resource-rich land, with marshlands, a refuge for all kinds of birds. Now we are surrounded by polluting industries, and there is pollution everywhere, even inside us. (Kannan et al., 2024, n.p.)

Ennore's third wave of ports-led industrialisation, beginning in the mid-1990s has proven even more destructive—threatening not only the wetlands and their people but the region as a whole. It also suggests that the Dravidian model, like developmentalism before it, may have exhausted its emancipatory potential, yielding to a naked-faced pursuit of capitalist growth.

3.4.4. The Third Wave: Port-led Industrialisation

Rolling in with the neoliberal reforms, the third wave was propelled by an urban logic that pushed city-regions to market themselves to capture global investments by terra-forming their geographic and physical assets. This new form of urbanism—referred to as neoliberal urbanism by Vives Miró (2011)—performed to the dictates of capital with cities jockeying to position themselves in “higher positions of the hierarchical global

urban network in which competitiveness is the key” (p. 120). For coastal cities, this was best done by the establishment and expansion of maritime ports.

The success of port-led growth, though, hinged on the availability of land in the immediate vicinity to accommodate port facilities and related activities, industrial areas to receive and supply raw material and finished products and connectivity with the port’s catchment in the hinterland through highways, expressways and waterways. In 1992, when Ennore Port (later renamed Kamarajar Port Ltd (KPL))—the first to be set up in the Ennore region—got its environmental clearance, the ostensible logic was of decongesting the Chennai port (Ministry of Environment & Forests, 1992). The port was subsequently set up as a captive coal jetty serving North Madras Thermal Power Station.

Between 1999 and 2013, two major facilities were built on Kattupalli island: a Government of India-owned port and a public–private port-cum-shipbuilding yard majority owned by Larsen & Toubro with the state government as a facilitating partner. Separated from the mainland by the Ennore backwaters, these ports demanded connectivity and backup space for logistical infrastructure, triggering the illegal conversion of protected wetlands into warehouses, hydrocarbon terminals, coal yards, conveyor corridors, bridges and roads. The riverbed was repeatedly gouged to lay oil and gas pipelines, while productive fishing grounds offshore were dredged to create berths for ocean-going vessels.

Even as the Government of India rolled out grand infrastructure projects for port-led development under its Sagarmala (garland of ports across the coast) scheme (Ministry of Shipping, 2016) and highway connectivity through the Bharatmala (garland of roads across Bharat-India) project, Tamil Nadu government deployed its own resources and agencies to provide last-mile connectivity from National Highways and railway trunk routes to the ports (Tamil Nadu Road Development Corporation, n.d.). The grand spatial vision linking Ennore to distant global locations and investors includes manufacturing hubs for polymers and heavy engineering, an industrial township, the Japanese Government-funded Chennai Peripheral Ring Road connecting the port to major national highways radiating out of Chennai, a Japanese smart city (Economic

Diplomacy Division, 2018) and development along the Chennai-Bangalore Industrial Corridor (Japan International Cooperation Agency, 2015; Murthy & Jayaraman, 2025). These projects are part of the plans to improve infrastructure on a “war footing basis” to “facilitate and attract more Japanese investments both in manufacturing and infrastructure sectors in the state of Tamil Nadu. . .” (Tamil Nadu Road Development Corporation, n.d.).

Local fisherfolk, whose livelihoods and identities were inseparable from the wetlands, fiercely contested this spatial vision that sought to erase place-based particularities and the meanings and relationalities between local communities and the water-lands they inhabit. Over more than three decades, they deployed a range of strategies spanning public, cultural, and legal arenas to resist degradation and encroachment. Their actions drew from music and the arts, seafood festivals, street demonstrations and litigation to create a public mood that made visible their way of seeing and valuing the water-lands against the state’s developmentalist framing.

Despite the permanent loss of substantial tracts of wetland to industrial infrastructure, the fisher struggle achieved notable successes. Legal victories compelled orders for remediation and prevented encroachment of at least 1,000 acres of wetlands (Government of India, 2018; Sabrang, 2017). Guided by the research questions, the exploratory thread throughout this thesis traces how subaltern fishers survived and resisted successive waves of erasure and even prevailed over far greater forces, and what sustainability transformation looks like when informed by the spatial politics and dynamics of subaltern resistance. While these questions are dealt with in Chapters 6, 7 and 8 where empirical observations are analysed, the following chapter turns to the analytical framework that grounds this inquiry to trace how power, space, and ignorance interact in the making and unmaking of transformative resistance.

Chapter 4

A Framework for Analysing The Good Fight:

Theoretical Review

Subaltern struggles have done more to defend cultural and ecological diversity, and realise subaltern visions of justice, equity and equality, than elite efforts and state action have (Scheidel et al., 2018; Temper, Demaria, et al., 2018; Temper, Walter, et al., 2018). Available research also points to the need for more attention to subaltern EJ struggles as sources and drivers of just sustainability transformations. This chapter reviews frameworks and concepts that can help analyse:

- a) how such struggles emerge from the margins to challenge hegemonic processes that deny recognition to them and their ways of knowing;
- b) how they contribute to transformative change; and
- c) what transformation looks like when seen from the perspective of subaltern struggles.

To understand resistance, one must first unpack how systems of domination justify and sustain themselves, and how they provoke resistance. Domination—manifested as oppression and injustice—is maintained not only by coercive force but by shaping how we think about, see and know the world (Mills, 2015, as cited in Bain, 2022). Following Foucault’s understanding of power and knowledge as co-constitutive (Foucault, 1995), much scholarship has examined the knowledge-power truth regime, while also acknowledging their limitations in conceptualising resistance (McNay, 1994) or explaining why some yield while others resist (Fox, 1997, cited in Yates, 2014). In addition to these regimes of knowledge and power, theories of ignorance are crucial for understanding how domination and injustice persist—and how resistance emerges (Bain, 2022). Of particular interest to this thesis are those forms of ignorance that are not merely accidental gaps in knowledge but are either consciously produced, or unintentionally generated and nurtured, and serve to sustain domination or oppression. The construction of what is known, and what remains unknown, wrongly known or

rendered unknowable, is a power-laden exercise. Tracing what is not known and remains hidden can be a powerful epistemological exercise to understand and reshape the “political values at work in our knowledge practices” (Sullivan & Tuana, 2007, p. 2). This chapter reviews the conceptualisations of justice, recognition, ignorance and resistance, and draws on political ecology as an analytical framework to examine how struggles from the margins may be understood as forces of transformation.

Building on Chapter 2’s discussion of recognition and misrecognition as justice and injustice, this chapter first elaborates the ignorance–power axis and its role in shaping domination and subordination. It then introduces Medina’s epistemology of resistance as a lens for analysing how subjugated knowledges can be mobilised against hegemonic frameworks. Finally, the chapter draws from Lefebvrian urban theory, insurrectionary political ecology, and subaltern resistance studies to prepare the ground for the political ecology framework of transformative resistance that will be fully articulated later in this chapter.

4.1. Revealing the Unknown: From Ignorance to Justice

This section examines the interplay between ignorance and justice, tracing how struggles for recognition (as justice) arise within—and against—fields of ignorance. These struggles seek to reveal what is unseen or deliberately obscured, and to name the silences through which injustice endures. By reviewing scholarship on recognition and ignorance, the section highlights how each concept shapes and is shaped by the other and how their entanglement provides a conceptual basis for analysing subaltern struggles.

The First National People of Color Environmental Leadership Summit (1991) affirmed the “right [of people of colour] to participate as equal partners at every level of decision-making. . .” (Principle 7). The principles articulate distributional and procedural aspects of justice clearly and visibly, leaving unsaid the necessary precondition enabling them: that of recognition. Recognition as justice addresses the processes and conditions generating mal-distribution and exclusion from decision-making fora (Fraser, 2008; Young & Allen, 2011).

For subaltern struggles, recognition is inseparable from the pursuit of dignity, often addressing non-material and quality-of-life concerns (Pulido, 1996). Recognition, whether individual or collective, is the first step in resisting injustice, and marks the moment when marginalised groups assert their visibility. This process can trigger what McAdam (1999) calls cognitive liberation: a growing awareness of injustice, discrimination, and the capacity to challenge them individually or collectively.

Recognition can be superficial, insincere and tokenistic. However, even shallow or insincere recognition may be tactically welcomed by marginalised communities as a stepping stone toward more meaningful forms of recognition. Svarstad and Benjaminsen (2020) argue that increased recognition by state or society can raise the status of marginalised groups and reduce injustices, even if incomplete. When won through struggle, even partial recognition disrupts the oppressor's denial and signals cracks in the edifice of misrecognition.

Svarstad and Benjaminsen (2020) present two epistemological approaches to decolonise recognition: The first, 'senses of justice' (p. 2), foregrounds the perspectives of affected people, allowing them to articulate their own views on environmental interventions. This approach is especially valuable for avoiding the risks of stereotyping and paternalism that arise when scholars or activists presume to speak for subaltern groups. The second, 'critical knowledge production' (p. 2), insists that the capacity of affected groups to produce their own knowledge is central to achieving environmental justice. Both approaches centre lived experiences: they make visible the racialised, genderised or caste-marked experiences of environmental reality, while challenging the epistemic blindness of dominant accounts.

An example from mainstream environmental historiography in India provides a case in point. The origins of Indian environmentalism is usually traced to the Chipko (hug-the-tree) movement of the 1970s (Gadgil & Guha, 1994). However, decades earlier, an eminent constitutional jurist—Dr. B.R. Ambedkar³⁹—from a formerly untouchable caste

³⁹ Born into a Dalit family, Bhimrao Ramji Ambedkar was a prominent Indian social reformer who championed the rights of Dalits. As an eminent jurist, he played a key role in drafting the Indian constitution and was instrumental in the constitutional abolition of untouchability and caste-based

led the Mahad struggle in Maharashtra when Dalits fought against untouchability and asserted their right to draw water from the Chavdar tank. The Mahad protest was as much about the right to dignity—a fight for recognition—as it was about the right to water. This movement against caste-based exclusion of a community from natural resources is not mentioned in “the standard chronicles of Indian environmentalism” (Sharma, 2022, p. 83)—an ironic non-recognition of a powerful struggle for recognition.

Disrupting elite historiography with stories from below complicates notions of freedom, justice and rights. Sarukkai (2012) observes for the Indian subaltern, lived experience is less about freedom than a lack of it in an experience, such as the inability to opt out of unpleasant or harmful experiences—breathing polluted air, performing hazardous and dehumanising labour or consuming unhealthy or unsafe food and water (cited in Sharma, 2022). Framing environmentalism through embodied experiences (Sharma, 2022), and injustice as unfreedom (Ranganathan, 2022a) enriches political ecology by exposing the mechanisms of domination and unravelling the “history of the present” (Foucault, 1995, p. 31).

4.1.1. Ignorance as Power

Systems of domination emerge and sustain themselves by producing non-existences or “absences” (Santos, 2012, p. 52). Santos identifies five interrelated monocultural logics through which modern science enacts these erasures. The first is the monocultural logic of knowledge; by privileging Western science and positioning it as the sole arbiter of knowledge, the first logic erases all other ways of knowing. The second logic—of linear time—portrays history as a singular, unidirectional trajectory of progress and renders invisible all other conceptualisations of time. The third logic, the monoculture of dominant scale, privileges the global over the local and the universal over the particular. The fourth is the logic of capitalist productivity that asserts that all other forms of production are inadequate, inefficient and undesirable. The fifth and final logic is also the most insidious. The logic of naturalisation of differences devalues—not just

discrimination. See The Editors of Encyclopaedia Britannica. (2025). Bhimrao Ramji Ambedkar. In *Brittanica*.

practices or knowledges—but entire groups as inferior and non-credible (pp. 52-53). Such erasure is the concern of ontological politics or political ontology, a concept discussed in Chapter 2 (Blaser, 2013; Cadena & Blaser, 2018; Escobar, 2016).

Euro-modern ontology, reinforced by colonial power and epistemic erasure, asserts itself as the only valid reality and Western science as the sole legitimate way of knowing (Latour, 2000; Quijano, 2007). Other knowledge systems, when acknowledged at all—often as a display of liberalism—are deprecatingly referred to as culture or dismissed as superstition (Blaser, 2013). Mills (2022a) notes that political economies require cognitive economies, selectively recognising and ignoring knowledge to sustain themselves. Ignorance here is not absence but an active force: portraying alternatives as irrational and therefore non-existent.

Pohlhaus (2012) argues that this ignorance of the powerful is sustained

by refusing to recognise and by actively undermining any newly generated epistemic resource that attends to those parts of the world that they are vested in ignoring. . . on the grounds that those resources do not fit the parts of the world to which the group already attends. (as cited in Bain, 2022, p. 54)

Writing on the topic of white ignorance, Mills (2022b) explains that ignorance is an active cognitive and moral economy essential to conquest, colonisation, and enslavement. Inferiorising and dehumanising discourses are key tools in its epistemology. Ignorance, then, is not passive non-knowing but “interconnected, active, resilient, and even militant (sets of) absent beliefs, false beliefs, and pervasively distorting or deforming outlooks” that sustain and are sustained by notions of supremacy (Mills, 2007a, as cited in Bain, 2022, p. 48).

He writes, “The racial contract includes an epistemological contract, an epistemology of ignorance. ‘Recognition is a form of agreement,’ and by the terms of the Racial Contract, whites have agreed not to recognize blacks as equal persons” (Mills, 2022b, p. 96-97). This insight extends to caste, gender, and other essentialised inequalities. Ignorance thus sustains domination by constituting what is knowable and what remains unknowable (Medina, 2011). The discursive structures that produce spaces of

knowability also generate realms of unknowability, and subjects shaped within such frameworks only know what is within; their “epistemic lucidity” is inseparable from their blindness (Medina, 2011, p. 30).

Ignorance is not confined to discourse but extends also to practice, including in bureaucracies where ignorance, including “wilful manipulation and malicious lies” (Paul & Haddad, 2019, p. 302), can be “wielded as a strategic weapon” (McGoey, 2007, p. 217). Together, discourses and practices play a key role in constructing social reality. Foucault (1995), in his analysis of the prison, demonstrates how power and knowledge are articulated both through discourse and everyday practices that give institutions their material force—subjects were to be kept under total surveillance, a 24x7 visibility. Their behaviour, conditions and tendencies had to be documented, recorded and classified. This level of visibility generated new forms of knowledge but also blindness about what was left unsaid. The technologies of seeing also determined what would remain unseen, unrecorded and rendered non-real. Bureaucratic practices such as documentation, omission, and procedural delay likewise shape social reality by making certain facts actionable and others ignorable, operationalising ignorance as much as knowledge. McGoey (2007) shows how UK health regulators ignored evidence on anti-depressant risks not by error, but as strategy:

Error and ignorance have so long been thought of as antithetical to the pursuit of truth and knowledge that to realise that bureaucratic errors might be perpetuated on purpose, that a regulatory body might systematically and purposefully conduct faulty inquiry after faulty inquiry in order to serve a more implicit interest at first strikes us as absurd. We are so immersed in episteme of the will to truth and the will to power that we forget Nietzsche postulated a ‘will to ignorance’ as preceding these more celebrated two. In order to grasp why [UK’s Medicines and Healthcare Products Regulatory Agency] remained blind for long to the information for which it was ostensibly looking, one must dispel the automatic equivalence of knowledge as power and realise that in cultivating a purposeful ignorance—in refusing to admit even that one harbours a secret—one often wields the most strength. (p. 221)

The refusal to collect evidence or ignore gathered evidence, lying, committing fraud and wilfully manipulating narratives in the face of contrary facts are all strategies that expose the power of the will to ignorance and to purposefully remain ignorant. This “will to ignorance” preserves authority and deflects or defers accountability. McGoey (2012) points out that:

the mobilisation of ambiguity, the denial of unsettling facts, the realisation that knowing the least amount possible is often the most indispensable tool for managing risks and exonerating oneself for blame from catastrophic events. (pp. 2-3)

This is what Galison (2004) calls “anti-epistemology” or the systematic deflection and obscuring of knowledge to justify inaction in the face of inconvenient truths (cited in McGoey, 2012, p. 3). Such an ignorance, when spread across an entire institution, requires a consensual will to ignore among members of the group.

4.2. Epistemology of Resistance

Subjugation works not only through force, but through the manipulated and erasive reconstruction of people’s histories, memories, and knowledges. It operates by not seeing, ignoring, distorting or forgetting the experiences and knowledges of the subjugated. “[M]anagement of memory” is key to sustaining subjugation (Mills, 2007, p. 28) or resisting it. Through such management, dominant cultures marginalise and delegitimise knowledges, memories and experiences of vanquished cultures, rendering them forgotten, non-existent or unworthy of recognition. Yet two can play the same game: by resisting such erasive governance of memory and reasserting what power seeks to disappear, subaltern and subordinate cultures can unsettle dominance and reanimate what has been denied.

Drawing on Foucaultian genealogy, Medina (2011) presents an epistemology of resistance (See Figure 5) that lays out a subversive strategy of mobilising counter-memories to provoke an “insurrection of knowledges” (Foucault, 2003, p. 9). Genealogy here is a method of unearthing the history of the present to reveal which knowledges were sidelined in the construction of dominant narratives. Foucault cautions us not to

view marginalised groups as powerless or ignorant, but as peoples whose powers and knowledges have been diminished, blocked and erased. This genealogical lens allows us to confront hegemonic truths by mobilising subjugated knowledges—i.e., “the historical contents buried or masked in functional coherences or formal systematisations” (Foucault, 2003, p. 7). Such knowledges can be unearthed to critique taken-for-granted discourses, institutions and hegemonic histories.

Figure 4 visualises Medina’s epistemology of resistance as a dynamic tension between dominant and subjugated knowledges. The epistemology of ignorance reveals how domination sustains itself by legitimising certain memories and histories while erasing others. Through hegemonic processes, these “legitimate” knowledges form the visible body of authoritative truth and define the standards of legitimate knowledge. Yet, at the base, the suppressed, hidden and distorted memories persist as counter-memories and counter-histories within an epistemology of resistance; when unearthed and recirculated, they generate discursive friction that challenges the dominant narrative. Activated by poly-scalar events (local, regional, or global) such as floods, political upheavals, or a localised industrial disaster, these counter-knowledges can seize ephemeral windows of opportunity to rise in insurrection, unsettle hegemony and redefine the boundaries of what counts as knowledge, truth, and justice.

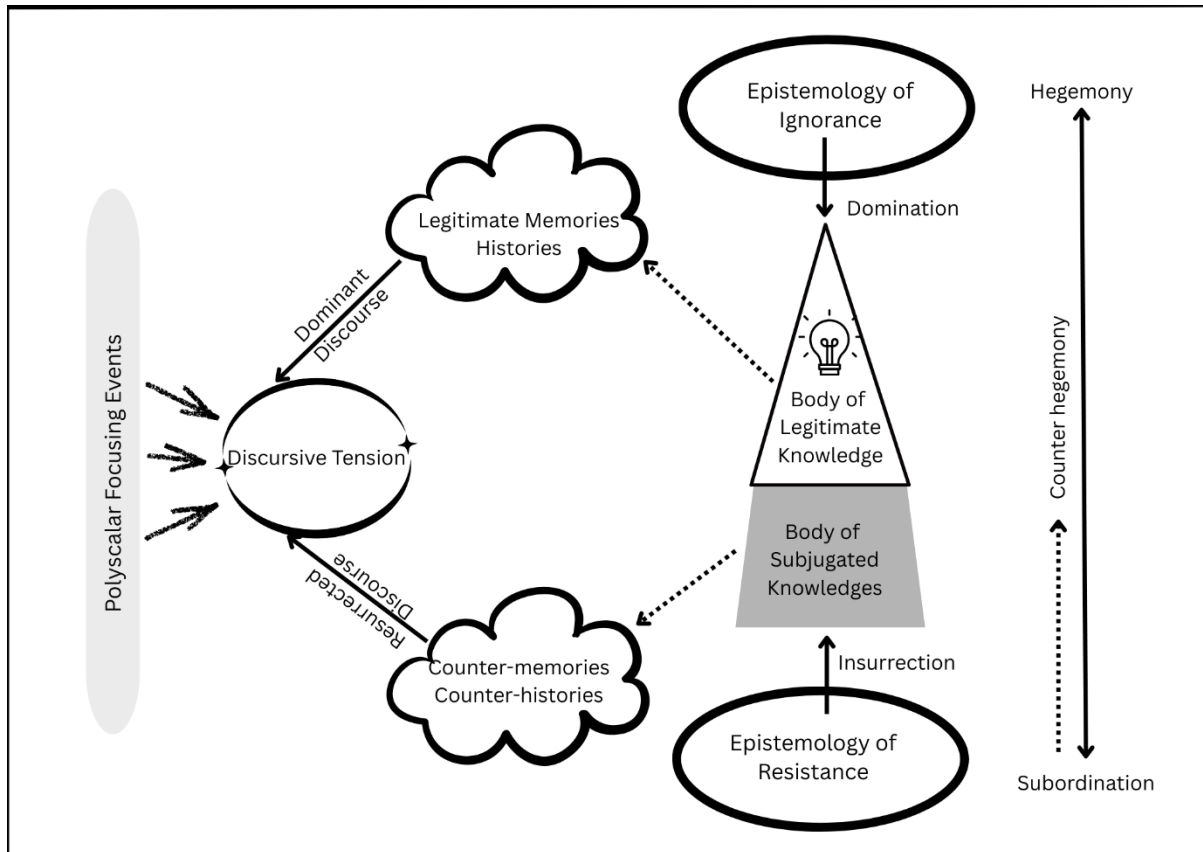
Both Mills, through his references to counter-memory, and Foucault with his emphasis on genealogy—the method to unearth the history of the present—highlight the potential of counter-histories to disrupt the linear temporality of official narratives. Mills (2007) argues that official histories are constructed through both “collective memory” and “collective amnesia” with “we the people” invoked in such accounts representing only those identities legitimised by dominant groups (pp. 28-29). In this victors’ history, the stories of resistance from the standpoint of the vanquished are systematically excluded.

Foucault similarly critiques the ways official history casts entire peoples, their experiences, and their struggles into “darkness and silence” (Foucault, 2003, as cited in Medina, 2011, p. 15). Attending to these silences allows a “return to the origin” of discursive practices—the moment when domination was first inaugurated. Foucault

argues that tracing power back to its roots is “an effective and necessary means of transforming discursive practice” (Foucault, 1977, as cited in Medina, 2011p. 16).

Figure 4

Epistemology of resistance



Note. Author’s representation of Medina’s (2011) framework. See Medina, J. (2011). Toward a Foucaultian epistemology of resistance: Counter-memory, epistemic friction, and guerrilla pluralism. *Foucault studies*(12), 9-35. <https://doi.org/10.22439/fs.v0i12.3335>

The victor’s narrative often portrays itself as a story of making, constructing, or developing supposedly unmade and uninscribed lands and peoples. Counter-histories must therefore confront this presumption of an uninscribed earth (Spivak, 1985) by resurfacing the erased histories of the vanquished. Such an insurrection animates past and present struggles alike, and interrupts the smooth linearity of progress narratives upheld through law, planning, institutions, and administrative practice.

Yet marginalised subjects may not always unsettle the epistemic status quo on their own. At times, insurrections require collaboration with genealogical⁴⁰ scholar-activists⁴¹ who, by virtue of their privilege and access to elite publics, can help circulate subjugated knowledges or support the formation of counter-public spheres. In other contexts, the very act of recovering and disseminating suppressed knowledge may itself catalyse epistemic shifts, elevating the status of subaltern knowers and enabling resistance without external mediation.

The effectiveness of such insurrections depends on the dynamism of struggle strategies: critical knowledge production, organisation- and network-building, subaltern historiography, counter-mapping and counter-planning, advocacy, and lobbying. Their impact also hinges on responsiveness to polyscalar focusing events—political developments or extreme weather events that can open media windows to amplify resistance.

To understand how resistance—failed or successful—relates to transformation, I turn next to Political Ecology and its conceptualisation of transformative resistance. This framework shows how struggle strategies emerge from specific contexts, creating opportunities for transformation while also revealing the transformative processes already at work.

4.3. Political Ecology (PE) Perspectives on Resistance

Heavily influenced by Marxist thought, contemporary PE has evolved through successive iterations—from cultural ecology (Steward, 1937, cited in Roberts, 2020) to structuralist and post-structuralist strands. This section briefly traces that trajectory,

⁴⁰ Working in the spirit of Foucaultian genealogy, a genealogical scholar-activist is someone who exposes the historical contingencies, exclusions, and power relations that shape present truths and subjectivities. In short, the adjective genealogical denotes the orientation of the activist as one committed to tracing production of ignorance and dominance, and to unsettling them through the collaborative recovery and recirculation of buried knowledges.

⁴¹ The term scholar-activist rather than just “scholar” and/or “activist” emphasises that the two need not be distinct roles. Activists engaged in struggles for social change often undertake the systematic gathering of knowledge, subject it to rigorous and critical reflection, and contribute ethically to bodies of knowledge that extend beyond themselves. Scholars engaged in gathering and production of knowledge do so with an express intent to change the world for the better.

focusing on how PE developed as a framework to study environmental degradation, social marginalisation, and their entanglements with multi-scalar political–economic processes. I then outline key concepts drawn from Dunlap’s (2020) *Insurrectionary Political Ecology*, Lefebvrian urban theory (Lefebvre, 1991, 2003a) and subaltern resistance studies (Chandra, 2015; Chatterjee, 2006; Dunlap, 2020). These inform the PE framework I construct to analyse the emancipatory tendencies of transformative resistance. Before doing so, I first introduce Sovacool’s (2021) PE framework for climate change mitigation which I reformulate for this research.

4.3.1. Political Ecology: A Brief History

Political ecology emerged both from and in critical response to cultural ecology (Peet & Watts, 2004). While cultural ecologists applied a restrained version of Marxist thought to study subsistence economies, they focused primarily on how human interaction (through labour) with nature shaped social organisation (Robbins, 2004, cited in Roberts, 2020). Despite its materialist leanings, cultural ecology remained confined to culture–nature interactions at a local land-use level. For instance, Steward’s (1937) study of desert communities in the U.S. Southwest argued that cultural patterns were shaped more by local environments than by diffusion from other societies (as cited in Roberts, 2020). While innovative, this framing treated cultures as relatively self-contained, failing to explain transformations driven by capitalist globalisation, where “the local was subordinated to a global system of power relations” (Biersac, 2006, p. 9).

Political Ecology emerged in response to these limitations and to the rapid transformations wrought by neoliberalisation and global capitalism. It framed environmental degradation both as a cause and consequence of intergroup inequalities (Harvey, 1974), exacerbated by state policies and economic processes. In its structuralist avatar, PE combined historical contextualisation with analyses of how land-users’ relations with land shifted in response to multi-scalar pressures from local through global (Blaikie & Brookfield, 2015; Neumann, 1992; Roberts, 2020). Whether applied to rural landscapes altered by extractive industries, industrial agriculture, and infrastructure projects, or to urban environments, PE helped illuminate the politics of

“whose use of, claims to, and/or perceptions of the environment prevail, and why?”(Karlsson, 2015, p. 350).

Early PE was, however, criticised for portraying capitalism and the state as monolithic and all-powerful forces (Moore, 1993). This view overlooked the fact that both often had to negotiate with resistance, including from subaltern struggles and non-human life, and that power was not unidirectional or centralised (Bachrach & Baratz, 1962). It also obscured how some local actors—including those within subaltern communities—could facilitate capitalist penetration, or how entire communities might strategically engage with state and market institutions. A more nuanced approach was needed, one that recognised the heterogeneous and sometimes conflicting agendas of state, market, and local actors (Moore, 1993).

Subsequent iterations of PE incorporated these critiques, refining understandings of how environmental transformations are shaped by social hierarchies of caste (Baviskar, 2003, 2011, 2020; Ranganathan, 2022b; Reddy, 2021), gender (Agarwal, 1986; Agarwal, 1992; Agarwal, 2010), race (Heynen, 2016, 2019; Ranganathan, 2016), and sexuality (Heynen, 2018). This broadened framework produced a vibrant scholarship examining struggles over the distribution of environmental goods and harms, particularly those involving Indigenous and other subaltern actors (Escobar, 2006a; Oskarsson, 2013; Ranganathan & Doshi, 2018). Scholars extended PE into fields such as EJ conflicts (Ranganathan, 2016; Svarstad & Benjaminsen, 2020), climate justice (Goldman et al., 2018; Rice, 2014) and anti-/post-capitalist movements (Martinez-Alier, 2002; Peluso & Watts, 2001; Singh, 2019).

Despite this richness, relatively few PE studies examine conflicts as forces of sustainability transformation or analyse the transformative processes they foster. Notable exceptions include Scoones et al. (2015) and Stirling (2015) on emancipatory transformations; Piggot (2018) on how social movements affect fossil fuel projects; and Smith and Ely’s (2015) research on grassroots innovations. The growing scholarship on ecological distribution conflicts adds further insights (Martinez-Alier, 2009; Scheidel et al., 2018; Temper et al., 2020; Temper et al., 2015; Temper, Demaria, et al., 2018; Temper, Walter, et al., 2018).

Subaltern struggles deserve closer attention because they highlight unresolved issues of justice, dignity and equality. Their very act of resisting inequity is transformative for it requires imagining the world otherwise (Temper, Walter, et al., 2018). While PE has analysed the dispossessive and inequality-producing logics of dominant power, it has paid far less attention to the agency of subaltern actors and the emancipatory potential of their resistance (Scheidel et al., 2018; Sebastien et al., 2019).

This study addresses that gap by examining “conflict as productive” and transformative (Temper, Walter, et al., 2018, p. 749). The epistemology of resistance outlined earlier provides one lens to highlight how ignorance and the subjugation of knowledge operate as tools of dispossession even as counter-memories and counter-histories serve as emancipatory counter power. However, to fully grasp how struggle fosters transformation, a dedicated framework is needed. Before introducing it, I first clarify how this study uses the term transformation.

4.3.2. Knowing Transformation

The ideals of equality and equity must be at the core of sustainability transformation for the concept to be meaningful in the pursuit of justice. Only a transformation grounded in these ideals can address the roots of dispossession—namely, inequality, inequity and discrimination. These conditions sustain subjugation and uphold oppressive orders such as capitalism, patriarchy, caste, race and human exceptionalism which may operate independently or in combination. To be transformative, change must confront and weaken these systems.

Although often used interchangeably, the terms transitions and transformations imply different processes. Stirling (2015) distinguishes between the orderly nature of transitions and the contingent, emergent character of transformations. Viewed from the multi-level perspective on socio-technical transitions proposed by Geels and Schot (2010), transitions may seek regime-level change but leave landscape level structures undisturbed.⁴² In contrast, transformations are marked by their diversity, emergence,

⁴² Geels and Schot's multi-level perspective conceives of socio-technical transitions as occurring through interactions among three analytical levels: niches, which are spaces for radical innovations; regimes are the dominant structures, rules and practices stabilising existing systems; and landscapes are the most

and unruliness: they coalesce through social innovations, unsettle established structures, and are shaped by incommensurable forms of knowledge pursuing competing, and sometimes unknowable, horizons (Stirling, 2015).

Fraser (1995) draws another distinction—between transformation and affirmation. Affirmative remedies address inequities from within the system, without disturbing the structures that produced them. Transformative remedies aim to restructure “the underlying generative framework” (p. 82). Both can be explained using Fraser’s (1995) justice dimensions of recognition and redistribution. Affirmative approaches to recognition, for instance, enhance status for marginalised groups—such as women, gays or lesbians—without challenging the homo-hetero binary. Transformative approaches, like Queer theory, deconstruct the binary altogether and “destabilise all fixed sexual identities” (p. 83).

For redistribution, affirmative remedies appeal to liberal welfare systems for a greater share of resources but leave intact the political-economic relations that generate maldistribution and associated environmental consequences. Transformative strategies, by contrast, seek to repair inequities by altering the social division of labour and restructuring the production relations that generate inequality in the first place.

But, is an affirmative/reformist approach automatically non-transformative? Temper, Walter, et al. (2018) draw on Gorz’s (1967) concept of non-reformist reforms to argue otherwise. For Gorz (1967), a non-reformist reform is conceived not within the constraints of a given system, but “in view of what should be made possible in terms of human needs and demands” (cited in Akbar, 2020, p. 15). Subaltern struggles often unfold within the very frameworks that perpetuate inequality. Compromises and affirmative strategies can therefore become tactical steps toward deeper structural change rather than ends in themselves.

stable, broader environment comprising cultural values, political ideologies, and material conditions that shape and pressure regime over time. See Geels, F. W., & Schot, J. (2010). A multi-level perspective on transitions. In J. Grin, J. Rotmans, & J. Schot (Eds.), *Transitions to sustainable development: New directions in the study of long term transformative change* (1st ed., pp. 18-28). Routledge. <https://doi.org/10.4324/9780203856598>

When Gorz wrote his piece, some on the Left still clung to the belief in an inevitable working-class revolution, dismissing negotiation with the bourgeois state as a compromise that would delay the uprising. Others, like Gorz, rejected this purist stance; they theorised from within working-class struggles and argued that reforms could be both pragmatic and transformative. His concept of non-reformist reform distinguishes between reforms with status-quoist tendencies and those with transformative potential. Building on Gorz, and drawing on Akbar (2020); Engler and Engler (2021); and Temper, Walter, et al. (2018), I offer a tentative list of key features of transformative non-reformist reforms as comprising the following features. A reform does not have to exhibit all features to be non-reformist.

- **Means not ends, and Bottom-up:** They must emerge from people power and be conceived as steps toward substantive change, “as dynamic phases and not resting stages” (Engler & Engler, 2021, Making Change Structural section, para. 3);
- **Political education and unity:** They must serve to educate and unify people (Engler & Engler, 2021, Making Change Structural section, para. 3);
- **Embedded in transformative struggles:** It is the struggle that must pursue transformative goals, not the reform in isolation.
- **Prefigurative:** ‘Transformative reforms’ must pave the way for new social and economic configurations;
- **Democratising:** They must expand worker/community control over production processes/resources and collective destinies, not through majoritarian or merely procedural democracy, but by opening contested spaces for collective self-determination, participation, and epistemic plurality from below;
- **Decentralise power:** They must shift decision-making power away from elites and closer to communities;
- **Strengthen community:** They must strengthen the communities engaged in struggle even as they address the injustices they face.
- **Need versus feasibility:** They must be driven by what should be made possible to meet human needs and dignity; when should be made possible is restricted by

what is deemed possible, the reform should acknowledge the ideal that is being pursued to enable it to be in a dynamic phase rather than in a resting stage.

These features, although theoretical, resonate strongly with the dynamics of subaltern environmental struggles. Such struggles emerge against formidable odds, challenging injustices of recognition, resource distribution, and procedural and participatory exclusion. Their very emergence itself represents a transformative step toward just sustainability. However, as these struggles persist, and sometimes prevail, they become crucibles where inequality and injustice may either be dismantled or reinforced along familiar lines of caste, race, gender, class, and ethnicity. The following section introduces a framework to evaluate the transformative potential of subaltern struggles, examining the extent to which they disrupt or reinforce these structures of injustice.

4.3.3. Transformative Resistance Framework

Sovacool (2021) developed a framework to evaluate climate adaptation projects by asking: “Who are the winners and losers of adaptation projects? What underlying processes might affect the inequitable distribution of adaptation costs and benefits?” (p. 3). Drawing on political economy, political ecology, critical development studies and justice theory, he presented climate adaptation not merely as a techno-financial process but a “deeply political and ethical process” (p. 4). He argued that adaptation projects can “perpetuate enclosure (capture of resources), exclusion (unfair, exclusivist planning), encroachment (environmental destruction), or entrenchment (worsening of inequality or vulnerability)” (Sovacool, 2021, p. 2). These four attributes are further elaborated in Table 3.

Sovacool’s framework, designed to study the dispossessive tendencies of elite climate action, offers inspiration for analysing the emancipatory tendencies of subaltern resistance. To understand what transformation looks like from the margins, I develop a framework that identifies the processes within struggles that enable transformative outcomes, and the criteria to judge such outcomes. For this, I draw on concepts from Dunlap’s (2020) *Insurrectionary Political Ecology*, Lefebvrian urban theory (Butler, 2012;

Lefebvre, 1991, 2003a) and studies of subaltern resistance (Chandra & Nielsen, 2015; Chatterjee, 2006; Tornel & Dunlap, 2023).

Table 3

Conceptual typology of attributes of climate adaptation

Concept	Dimension	Explanation
Enclosure	Economic	Capturing resources or authority: transferring public assets into private hands, or the expansion of private roles into the public sector
Exclusion	Political	Marginalizing stakeholders: limiting access to adaptation decision-making processes and fora
Encroachment	Ecological	Damaging the environment: intruding on biodiversity areas or other areas with predisposed land uses, or interfering with ecosystem services
Entrenchment	Social	Worsening inequality: aggravating the disempowerment of women or minorities and/or worsening concentrations of wealth

Note. Reprinted from “Who are the victims of low-carbon transitions? Towards a political ecology of climate change mitigation,” by B.K. Sovacool, *Energy Research & Social Science*, 73, p. 2. Copyright 2021 by Elsevier Ltd.

4.3.3.1. Subaltern Insurrections.

Subaltern resistance is often insurrectionary rather than revolutionary, performed through “everyday actions” and “small attacks” (Dunlap, 2020, p. 1005). Unlike revolutions, which seek to install new arrangements under new regimes, insurrections aim to “arrange ourselves” rather than be re-arranged (Stirner, 2017, cited in Dunlap, 2020, p. 993). Subaltern resistance, then, is less about regime change or negation than about opening negotiations—about getting a foot in the door, being heard, seen, acknowledged and respected (Roy, 2015).

Examples abound. In India’s freedom struggle, peasants and other subaltern actors contributed to revolutionary movements that achieved regime change. But they were later excluded from shaping the post-revolutionary order (Chatterjee, 2006). Often, new regimes reproduce old oppressions. As Kirkpatrick Sale observed “The trouble with

revolutions is that by definition they go full circle and lead us back to where we came from” (Sale, 2000, cited in Dunlap, 2020, p. 994).

This threat of recycled oppressions is particularly relevant when conceptualising sustainability transformations. While [un]sustainability and [in]equity have each been studied extensively, “there is remarkably little systematic work to address their interlinkages” (Leach et al., 2018, p. 2). Transformations that ignore intersectional subaltern realities risk reproducing old oppressions. Such blind spots remain invisible unless challenged by subaltern resistance. Sustainability transformation, then, cannot be seen as a fixed end-point; it must remain in constant dialogue with resistance, a point that will be revisited in later chapters.

To resist is to recognise one’s subordination and the conditions that produce it (McAdam, 1999). It is also to “endure or withstand those conditions in everyday life” (Chandra, 2015, p. 565). Resistance from positions of relative weakness involves purposeful acts of insubordination and insurrection designed to rearrange power relations and create more favourable, potentially emancipatory, conditions (Chandra, 2015).

If subaltern resistance is often insurrectionary rather than revolutionary, Dunlap (2020) provides a framework for understanding how such practices also intervene in socio-ecological relations. As a “lens of research and struggle” Dunlap’s (2020) Insurrectionary Political Ecology combines insurrectionary anarchism with ecological practices inspired by Masanobu Fukuoka’s (1978) *One Straw Revolution* on no-till farming. Using this approach, I frame transformative subaltern resistances as those whose methods, practices and objectives meet one or more of the following criteria:

1. They are insurrectionary rather than revolutionary. Where revolution is aimed at ushering in new and universal arrangements, insurrection is rigidly anti-authoritarian, preferring autonomous, informal and collective arrangements that are rooted in place-based and context-specific social and cultural practices.
2. They subvert authority through everyday actions and small attacks that reject domestication, defy enclosure through acts of commoning aimed at liberating physical, cultural and epistemic spaces.

3. They disturb capitalism through a) acts of resistance that refuse to yield ground for capitalist activities, b) practices that insist on and persist with anti- and non-capitalistic relationalities such as care work, community economies, mutual aid and informal organisation, and c) the maintenance of relationships with local place that are not defined merely in economic terms. The anti-authoritarian element of refusing to be arranged and the anti-capitalist tendency converge forcefully in their refusal to be proletarianised.
4. They deconstruct socio-ecological separation by resisting the push to enter into an exploitative, hierarchical relationship with the non-human world, and fighting for the protection and revival of communal infrastructures of production and survival of all life, and for the healing of degraded and broken relationships with them.

Principles of insurrectionary politics point to enduring oppression and attempted erasure, and refusing to yield to capitalist and/or patriarchal systems of management through enclosure-defying commoning practices, care work and mutual aid as political acts of transformative subaltern resistance. In resisting proletarianization, these acts not only disturb capitalism but also strengthen other arrangements of managing production infrastructures that are egalitarian, self-organised and respectful of relations with non-human others.

4.3.3.2. Spatial Politics

Subaltern resistance is not only political and ecological but also deeply spatial. Seen through a Lefebvrian lens, such practices and intentions can be understood as socio-spatial politics—as acts that confront the capitalist state’s production of abstract space. States control, discipline and dispossess through spatial strategies. State-space relations, according to Lefebvre (2003a), operate across a triad of “moments” (p. 84-85) covering physical, social and mental spaces. Physical spaces refer to the national or jurisdictional territory transformed by networks, circuits, and flows through infrastructures of transportation, transaction of commerce and movement of finance. “An artificial edifice of hierarchically ordered institutions, laws and conventions” underpinned by values, language and culture produces and holds together the social space (Butler, 2012, p. 84). Both these are legitimised—or threatened—by the

production and counter-production of mental space which refers to the symbolic and representational space through which people construct or imagine the state.

In producing and maintaining these spaces, the state reproduces abstract space through three processes: Fragmentation allows the state to governmentalise space via master-planning, zoning, and drawing of revenue and administrative boundaries; homogenisation strips places of their particularities and relationalities to render them governable; and hierarchisation refers to how the state organises space physically and institutionally to serve capital and power.

Butler (2012) explains that only a state can hold together the fragmentation, homogenisation and hierarchisation of space needed to reproduce itself. It does so through its “legal, administrative and political structures of power” (p. 84). If urbanisation and accumulation are central to the state’s strategies of renewal (Brenner, 1997), Lefebvre’s State Mode of Production of space describes how the state organises capitalism through spatial control of people, land, cities and resources. This mode of spatial production provides the “geographical scaffolding” for the circulation of labour, commodities and capital (Brenner, 1997, p. 145).

The state’s eternal karma is to shape and reshape spaces to serve its goals and renew itself. These become dominant spaces that homogenise and erase place-based particularities. Yet every new configuration of dominance encounters counter-forces from environments, people and communities whose spatial logics are disrupted. These counter-forces create differential spaces where diversity and relationality are valued and restored through the re-appropriation of what was violently excluded by spatial abstraction.

Subaltern EJ struggles, even when not explicitly anti-capitalist, seek to restore and honour difference and relationality. They respond to the spatial violence of capitalist statecraft by reasserting plural ways of inhabiting space. Scholars such as Haraway (2016b) and Sarukkai (2012), have argued for more attention to the oppressive conditions of the present. In contrast, state or capital-produced spaces collapse the present into a fleeting moment between the past and the future. . .and permit the future to expand infinitely” (Santos, 2015, pp. 164-165). This abstraction of time reinforces the

logic of domination by masking the everyday insults and lived experiences of subaltern communities and non-human life, creating what Lefebvre (1991) calls “dominated spaces” or spaces shaped by political power and technological imposition.

He writes:

In order to dominate space, technology introduces a new form into a pre-existing space—generally a rectilinear or rectangular form such as a meshwork or chequerwork. A motorway brutalizes the countryside and the land, slicing through space like a great knife. Dominated space is usually closed, sterilized, emptied out. (p. 165)

Dominated spaces, Lefebvre urges, must be understood in relation to “appropriated spaces” (p. 165). Where the former reduce land and life to exchange value, appropriated spaces are relational, lived and oriented toward use value. These are shaped by human and non-human inhabitants through everyday uses, rhythms and practices. Rooted in the present, they pry open the cracks within dominated abstract space, and expanding lived time to expose everyday violence (Lefebvre, 1991).

The subaltern’s preoccupation with the present should not be mistaken for a lack of vision. Acts of appropriation are creative, suffused with the power to imagine utopias where life (living labour) reclaims autonomy from the lifeless machinery of capitalism (dead labour). The process of appropriation through diverse tactics of resistance is transformative as it re-energises physical and relational spaces drained by capitalist space-making, and creates conditions for human and non-human life to thrive.

In Lefebvre’s (1991) words:

In and by means of space, the work may shine through the product, use value may gain the upper hand over exchange value: appropriation, turning the world on its head, may (virtually) achieve dominion over domination, as the imaginary and the utopian incorporate (or are incorporated into) the real. (p. 348)

During struggle, boundaries of possibility are constantly redefined through everyday praxis. Lefebvre’s utopian thinking presents the urban as the realm of possibility, where futures are shaped as much by subaltern imaginations and practices as by elite visions.

What appears impossible under present conditions becomes real through struggle and imagination (Lefebvre, 2003b).

4.3.3.3. Framework of Transformative Resistance

The Political Ecology framework developed in this thesis builds on these principles to create a typology of transformative resistance, featuring four interrelated co-constitutive attributes—namely, enduring, commoning, opening (insurgent occupation) up and re-energising. Each encompasses processes and outcomes through which resistance unfolds and transformation becomes thinkable and, sometimes, achievable.

Enduring signals the quiet militancy of survival—the obstinate refusal to disappear despite attempted erasure. Enduring is a necessary practice in struggles waged across vast asymmetries of power. Enduring as a transformative practice is not passive persistence or individual stoicism but an active—and collective—politics of staying put, of sustaining life, memory, and livelihood in hostile terrains. Such endurance is transformative as it arises from two dimensions of consciousness: first, a collective awareness of one’s wrongful subordination (cognitive liberation); and second, a conscious recognition of emancipatory possibilities. The latter reflects the power to imagine that makes emancipation conceivable. Enduring unsettles domination by keeping the struggle alive through acts that strengthen relationships and solidarities even when visible resistance seems impossible.

Commoning builds on endurance. Where endurance is about holding on, commoning—both as practice and outcome—is about holding life together. It encompasses the everyday labour of maintaining or dismantling hierarchy in shared use commons (physical, social and epistemic), and the outcomes that challenge capitalist practices by resisting proletarianisation, enclosures and abstraction of space. Enclosure here refers not only to physical barriers but also to the restriction of plurality, the imposition of hierarchy, and the entrenchment of dominant spatial orders. Commoning creates opportunities for unseen, unheard and marginalised practices, memories, and actors to survive, become visible and audible, and even thrive. Through the ongoing work of caring for and governing the commons, subaltern actors assert their

own spatial visions rooted in place-based particularities and relationalities, reaffirming their right to define what counts as life, value, and belonging.

Opening Up (Insurgent Occupation) denotes moments when such grounded practices break into overt political visibility, and breaches in enclosures are used for the entry of and occupation by subaltern actors, practices and perspectives. Through counter-maps, occupations, and alternative plans, communities re-enliven space as a terrain of encounter where subaltern knowledges confront and re-compose dominant spatial orders. These openings, however transient, enact the possibility of autogestion—self-management and collective authorship of space—and articulation of imaginaries that were never thought possible.

Re-energising gathers the transformative force of the other three. It embodies the restoration of ecological and social vitality drained by capitalist abstraction — the re-enlivening of wetlands, solidarities, relationships and imaginations of justice. Re-energising enacts transformation as recovery and re-creation and involves the slow work of returning energy to both landscape and life accompanied by tangibly improved material conditions of life.

A struggle's transformative tendencies can be evaluated by examining how these attributes emerge and interact. Not every struggle will exhibit all four; however, even one may signal the beginnings of a broader transformation. The typology presented in Table 4 is not a rigid characterisation but a lens for discerning the emancipatory potential of subaltern resistance.

The two complementary frameworks presented in this chapter address the research questions by helping to analyse both the dynamics of subaltern struggles—and how and under what conditions they emerge from the margins—and their transformative tendencies. The Epistemology of Resistance illuminates how domination is sustained through ignorance and how counter-knowledges emerge to contest erasure. By centring epistemic friction, it exposes resistance as a process of re-membling and re-circulating subjugated histories.

The Political Ecology of Transformative Resistance extends this analysis to the realm of space and ecology, demonstrating how struggles against dispossession also generate

new socio-spatial arrangements and relational ethics.

Table 4

Typology of transformative resistance

Process	Explanation (Processes)	Outcomes
Enduring	- Resistance required to survive the present while keeping future possibilities open. - Involves recognising subordination, and enduring through small insurrections without capitulating or foreclosing future ones. - Demands consistent work to build allies, and nurture conditions and skills to rearrange power relations and stage more forceful insurrections.	- Thwarts total domination; - Keeps options open for further resistance; - Disturbs state's spatial vision through everyday appropriations and re-territorialising of 'dominated' spaces.
Commoning	- Everyday and insurgent acts, staged and planned insurrections, and legal and extra-legal actions to defy enclosures and monopolistic uses of space. - Plays out along four dimensions: • Relational: From monopolistic resource use to shared resource use and to collective reproduction of life and life-sustaining conditions. • Temporal: Rejects the enclosure of the present to a 'fleeting moment' by occupying, commoning and expanding it. • Physical/Spatial: Disregards, dismantles physical enclosures of lands/waters and restrictions over who gets to define/(re)configure space. • Epistemic: Rejects enclosures around whose and what type of knowledge matters. Elevates embodied, local, subaltern knowledge.	- Disturbs capitalism; - Resists, subverts, reverses enclosures, abstraction of space, primitive accumulation and proletarianization. - Makes visible subaltern histories and everyday experiences. - Asserts relationality, belonging to place and alternative knowledges. - Blurs boundaries separating legal/illegal, formal/informal, public/private and expert/lay.

Opening Up (Insurgent occupation)	- Created by refusal to be managed or erased. - Enabled by counter-plans/maps/projects/visions to challenge state's spatial production. - Populates decision-making and discursive spaces created by commoning with subjugated and subaltern actors. - Offers discursive and material openings for subaltern recognition and alternative imaginaries.	- Has both liberal and radical tendencies. - Expands access to decision-making processes/fora. - Reopens settled debates, legitimises subjugated knowledges. - Creates room for reimagining what is possible and facilitates radical imaginations of emancipatory futures rooted in everyday material experiences. - Improves equity, and visibility of women/marginalised groups and non-human life. - Creates autonomous and appropriated spaces for autogestion (self-management).
Re-energising	- Aimed at restoring material, ecological and socio-relational well-being. - Often the cumulative result of enduring, commoning and opening-up.	- Restores ecological health and biodiversity. - Improves livelihoods and public health. - Enables land-use practices that benefit the social/ecological base. - Builds local capacity to adapt to/withstand and recover from natural and other shocks without cost-shifting.

The next chapter turns from theory to method, outlining how these conceptual tools informed the research design and ethnographic practice. It argues that studying subaltern struggles demands a methodology attuned to solidarity, reflexivity, and positional accountability. Solidarity ethnography—developed from decades of activist

engagement and situations encountered in the course of this research—embodies this stance by treating research as co-production rather than observation. The methodological orientation introduced in Chapter 5 thus bridges the conceptual and the empirical to reveal the textures of erasure, emergence, and transformation that structure the substantive chapters to follow.

Chapter 5

Research, Activism and Solidarity Ethnography:

Notes on Methodology

In declaring that “The philosophers have only interpreted the world in various ways, the point is to change it,” Marx called for a theory grounded in history and material conditions—one that both explains and transforms the world (Marx, 1969, p. 15). This ethic informs my methodological approach and underpins the research presented in this thesis, which seeks to understand and facilitate the transformative processes inherent in and unleashed by subaltern struggles for environmental and social justice.

This study focuses on the struggle of subaltern fishers to protect and restore the Ennore-Pulicat tidal wetlands in Chennai, India—an eco-sensitive littoral gravely impacted by state-sponsored industrial encroachment and pollution. This research seeks to unravel the conditions and dynamics that enable subaltern actors to emerge from the margins and sustain collective struggle in pursuit of justice, dignity, and equality.

The focus is on how participants engaged in struggle make sense of failure and success, what sustains their commitment, and how individual and collective consciousness change over time. Additionally, this research is interested in understanding how, and to what extent, social struggle rearranges power relations. The aim is to illuminate the under-recognised and under-studied role of subaltern resistance in shaping radically just transformations.

This task requires sustained engagement with my own positionality and life experiences, as well as with the lived experiences and meaning-making practices of research participants. Understanding these practices demands a historically grounded, place-specific approach attentive to broader political, ecological, and economic forces operating from the hyperlocal to the global scales.

This chapter introduces the overarching theory of research, beginning with a discussion of positionality. It goes on to outline the methodological approach, research methods,

data types, data sources, and strategies used for data collection and analysis in relation to the research objectives.

5.1. Locating Myself

For a South Asian researcher, any note on positionality must begin with a declaration of caste. I was born into an upper caste, middle-class, Tamil, Hindu family with cosmopolitan values. I hold an engineering degree from India and a post-graduate degree in journalism from a university in the United States. After three years in Hong Kong as Asia editor of a trade publication, I returned to India to travel and write about development and environment.

As a young reporter travelling through India's villages and urban peripheries, I was exposed to the social and ecological costs of development, the conflicts triggered by economic growth in the name of development and the diverse ways in which local communities related to their place and dealt with change. The first article I wrote upon my return focused on the impacts of industrial aquaculture expansion on land, water and agrarian livelihoods in Tamil Nadu's rice-growing Cauvery delta (Jayaraman, 1995). Even before the article was published, I had become involved as an activist in the state-level Campaign Against Shrimp Industry. During the first decade of my life back in India, as an itinerant journalist and social activist, I was deeply involved in three life-changing social justice campaigns—the anti-dam struggle centred around the Sardar Sarovar dam on the River Narmada; artisanal fisherfolk's resistance to the Government of India's plan to open up India's deep-sea fisheries to global corporate interests; and the ongoing campaign for justice by survivors of the 1984 Union Carbide disaster in Bhopal. These movements—led by 'ordinary' people—equipped me with critical frames to evaluate modernist development discourses: Who pays? Who gains? Who defines the problem or solution? Who speaks for whom? These questions continue to inform my academic inquiry and shape my commitment to a research ethic grounded in accountability, solidarity, and an awareness of epistemic privilege.

Three years with a large global environmental non-governmental organisation (NGO) equipped me with a valuable set of skills—organising direct actions, facilitating meetings, developing strategy, conducting environmental sampling, developing

scientific understanding of pollution and environmental health, crafting media messages and mobilising spectacle to make protests visible. As the organisation's Asia toxics campaigner, I was involved in campaigns from the local to the international level, including efforts to influence the UN Basel Convention on Transboundary Movement of Hazardous Wastes, the Stockholm Convention on Persistent Organic Pollutants and the development of International Maritime Organisation's guidelines for dismantling of end-of-life ships.

However, this experience also left me disenchanted with the functioning of big NGOs. While these groups are adept at using their institutional privilege to open up democratic spaces, they often ended up occupying those very spaces, thereby limiting public participation. Privilege begets privilege, and what begins as an opportunity for self-representation by those less-privileged often ends up becoming an act of enclosure, exclusion and speaking 'for' marginalised others. It was one thing to speak for non-human agents, but quite another to represent human communities whose political voices are already systematically marginalised. The questions that had begun to haunt me—who defines the problem/solution and who speaks for whom—remain key stumbling blocks to justice, equality and sustainability.

By the turn of the millennium, the movements I had been associated with had sufficiently sensitised me to the burdens and responsibilities of my privilege. In 2002, along with two other colleagues disenchanted by big NGO activism, I co-founded what is now the Vettiver Collective. The Chennai-based Collective began as a corporate-critical, anti-capitalist, community-oriented solidarity group inspired by anarchist principles of non-hierarchical and affinity-based organising. We sought to practise a prefigurative politics, enacting within our spheres of influence the kind of just and anti-oppressive society we aspired to see in the future (Maeckelbergh, 2009, 2011, cited in Deschner & Dorion, 2020). I say 'sought to' because prefiguration is an ideal and an imaginary that demands an ongoing iterative process involving practice, reflection and correction. It requires open and continuous dialogue, both within the Collective and with fellow travellers encountered during activism. Bridging the gap between the ideal and practice is a constant and ongoing struggle, but also a vital effort for any politics that takes transformation seriously.

5.1.1. Theory of Solidarity

The Collective's theory of solidarity as humble, deep and slow was developed over more than two decades of solidarity activism alongside subaltern communities.

- Humble solidarity is an ethical orientation that resists the tendency of activists to occupy the spaces they help to open. It calls for activism that creates and nurtures democratic spaces where communities can speak for themselves. Humble solidarity entails remaining in the background, vigilant to the blindness of privilege both among those offering solidarity and within the communities that one works alongside. It implies an awareness of one's epistemic privilege and a respectful engagement with ontological differences. Practising humble solidarity means approaching other knowledge traditions with humility and curiosity, negotiating the terms of knowledge-sharing, and communicating insights in accessible ways without appropriating or distorting meaning.
- Deep solidarity refers to shared processes of liberation that are relational and reciprocal rather than transactional or charitable. It emerges from sustained bonds between community members, solidarity activists, and those mobilised to support the struggle. It begins with collective clarity by:
 - a) identifying aspects of the struggle that communities cannot address on their own, and aspects activists are deficient in—such as understanding place-based specificities;
 - b) jointly working out opportunities and areas for cross-learning between activists and communities;
 - c) determining the forms of solidarity—skills, networks, and capacities—that can reasonably be mobilised by activists; and
 - d) agreeing on how the joint struggle, comprising community members, activists, and supporters, can foster mutual empowerment.
- Slow solidarity underscores a long-term commitment and distinguishes solidarity from one-time or short-term support. Subaltern struggles unfold amid asymmetric power relations, and require stamina to endure fatigue and setbacks. Slowness is an insurance against disillusionment, enabling movements and solidarity actors to support each other through crises. The

survival and success of a struggle depends on its capacity to respond to crises and opportunities (reactive struggle) and to shape agendas and envision emancipatory futures (proactive struggle). Slow solidarity is a way of spanning both dimensions. It allows for reactive responses to opportunities and threats, even while sustaining proactive strategies that generate counter-narratives and turn epistemic tables to the struggle's advantage.

The Collective mobilises law, science, media and the arts to build solidarity for social justice struggles. It has engaged in place-based resistance to land alienation and ecological degradation, as well as workers' rights and urban anti-eviction campaigns.

My involvement as a solidarity worker with the ongoing fisher struggle for the Ennore-Pulicat wetlands began in 2013 and continues at the time of writing. Over time, I have developed relationships that span close friendships, respectful and collegial relations with village heads and elders, and at times antagonistic interactions with certain other male leaders due to differing views on engagement with industry and the political establishment.

5.1.2. Activist as Researcher

My positionality and familiarity with the field and its actors present challenges and advantages, while imposing responsibilities that shape my epistemic pursuits and methodology. I am an insider only in a narrow sense—as a male activist belonging to the community of predominantly male fishers engaged in struggle. In terms of caste, class and other markers of privilege, I am an outsider. This ambiguity highlights the limitations of the insider-outsider dichotomy as fixed categories (Wilkinson & Kitzinger, 2013).

This distinction is further complicated. As a researcher I am an outsider; but as an activist contributing to decision-making and collective action, I become a participant and an insider. Paechter (2013) calls this a “hybrid insider/outsider position” (p. 71).

This shifting positionality is a nuisance that has caused me and some research participants distress during the early stages of my fieldwork. I returned to Chennai from New Zealand in November 2023 and visited Ennore after 11 months away. My eagerness to reconnect with friends from the fishing village was tinged with anxiety, as reflected in my field notes:

Nervous. Hate consent forms. Don't want to spook K. What am I supposed to say: "Hi K: I'm still me, but I'm not me for this conversation. I am a researcher. I'll research you. . .ask you questions.

(Field notes, 20 November, 2023)

As I feared, K was unsettled—not by the explanation of my research, but by the formality of the consent process and my disclosure that he could refuse or withdraw at any point. "Why are you talking like this Anna (brother)?" he demanded, wondering if I was distancing myself from the struggle. He reminded me that our conversations had long been interrogatory in format. I would constantly question him and other fishers to understand the place-based specificities or their reading of a situation, threat or opportunity. The right to ask questions and get answers is a privilege earned after "passing the test in activist ethnography" (Deschner & Dorion, 2020, p. 219).

K wanted to know if the research would benefit the campaign. I admitted not directly, but explained that it would make me a better activist by allowing me to look at phenomena I had taken for granted with a new gaze. I really meant this. The consent process, I clarified, was a university requirement. He appeared satisfied.

This exchange helped me distinguish between my new role as a researcher-activist from my earlier role as activist-researcher. In the latter, knowledge-making was goal-oriented towards short- and mid-term campaign gains; knowledge and theories without near-term campaign utility were deprioritised. In my new role as researcher-activist, my pursuit is more open-ended. The objective is not near-term political victories—such as stopping an encroachment, cleaning pollution, winning court battles—but to answer broader research questions that may ultimately enrich strategies for transformation.

As an activist, there is little time for reflection or for engaging the rich body of scholarship on social change. That and the firefighting compulsions of solidarity work make it challenging to approach the field with radically new perspectives. The subtle shift from activist-researcher to researcher-activist comes with new frames that draw on both activist experience and scholarly insights to reveal new meanings of taken-for-granted phenomena.

Mobilising solidarity and co-developing strategies requires methods rooted in mutual learning. As discussed in humble and deep solidarities, one first must work with the community—of fishers in this present case—to develop a shared understanding of problems. Fishers need to grasp policy, technical, financial, scientific and legal bases of state or corporate actions; solidarity workers must learn from the fishers—their values, sciences and ways of knowing, and interpretations of those same actions.

From 2012 onwards, my colleagues Saravanan and I immersed ourselves in Ennore, learning from the fishers over extended boat trips, and in conversations at homes or on the riverside. This was a long process of learning to ‘see as fishers see,’ unsettling for someone trained in Western science but crucial for building common ground. The resulting “epistemic disconcertment” (Verran, 2013, p. 148) between our different ways of knowing became a productive force, enabling co-production of critical knowledges.

I recognise that the activist methodology we practised was a form of ethnography—combining observation, field immersion, and document and archival analysis (Fetterman, 2008). In Tamil, a grassroots activist is called *kaḷa-p-pōrāḷi*—literally field warrior—deriving from the Tamil *kaḷam* (pronounced with a retroflex L sound), meaning ‘field’ or field site. *Kaḷa-p-paṇi*, or field work, is a prerequisite to be an effective *kaḷa-p-pōrāḷi*. An activist must first be a field worker. Fieldwork builds relationships and fosters bilateral learning between activists and communities. This rite of passage is essential to collaboratively “design effective social change processes” (Greenwood & Levin, 2005, p. 54). This activist grounding in field-based, mutual learning processes shaped the methodological choices that I elaborate below.

5.2. Methodological Approach

Each of the diverse perspectives on sustainability and transformation discussed in Chapter 2 comes with power-laden assumptions on what processes and which actors will drive sustainability transformations. Questions of power are central to understanding which sets of processes and actors are pursued and which ignored. Critical theory as an approach that interrogates power structures, ideologies, and social relations shaping knowledge, culture and institutions is useful not only to reveal conditions of domination and injustice, but also to transform them (Horkheimer, 2002).

The objective of a critical mode of enquiry is to understand rather than predict or control, and to pursue knowledge as a situated, contextual and historically mediated product generated within power relations (Burr, 2015), a task best accomplished by “interpretive, critical, performative qualitative research” (Denzin, 2017, p. 8).

The methodological design of this study is rooted in a social constructionist epistemology and informed by critical qualitative methodologies. Berger and Luckmann’s (1966) *The Social Construction of Reality* argues that human beings produce reality, truth and the world through social interactions and processes (as cited in Burr, 2015). Burr (2015) emphasises the anti-positivist orientation of such a constructionist approach.

Critical traditions—including, feminism, post-colonial and Indigenous studies and critical pedagogy—differ on emphasis but share a commitment to research as political emancipatory practice (Lather, 2007, cited in Denzin, 2017; Denzin et al., 2008, p. 7). Extending this emancipatory orientation, scholars such as Haraway (2016a), Barad (2007) and Latour (2004) have critiqued the over-reliance of critical theory on representation and social construction, and its failure to engage with the agency of matter and the more-than-human world. They argue that while critical traditions excel at unveiling relations of domination and deconstructing facts, they often neglect how facts themselves are assembled and held together by diverse networks of humans, non-humans, institutions and materials.

Each scholar points to the traps of dualist thinking: Haraway (2016a) collapses the nature-culture divide through her notion of “naturecultures” (p. 93). Barad’s (2007) theory of intra-action (p. 50) bridges the meaning-matter gap by pointing to their co-constitutive emergence. Where inter-action assumes the productive mingling of individual elements with pre-existing agencies, intra-action asserts that agencies “emerge through intra-action” and “don’t exist as individual elements” (p. 50). Latour (2004) similarly calls for a shift from viewing realities as static “matters of fact” to engaging them as “matters of concern” (p. 225)—as a gathering or assemblage of humans, non-humans, artefacts and more-than-human agents. Because we are always entangled with these assemblages, Latour calls for attention not only to how they are composed but also to how they might be maintained with care and accountability. A

Latourian view of the Ennore creek as a matter of concern, for instance, would reveal it as a dynamic assemblage of fishers, sediments, tides and monsoons, industries, pollutants, fish, laws and infrastructures whose entangled intra-actions continually draw publics together around questions of survival, justice, and ecological responsibility.

For this study of subaltern fisher-activists' resistance, two other caveats—drawn from critical Indigenous studies (Battiste, 2000a, 2000b; Bishop, 1994, 1998; Churchill, 1996; G. Smith, 2000; L. T. Smith, 1999, 2000; as cited in Denzin et al., 2008)—are particularly relevant. First, critical theory must take care to not turn the research subject “into an essentialised ‘other’ who is spoken for” (Bishop, 2005, cited in Denzin et al., 2008). Rather than assume a politically neutral position outside the social situation under study, the researcher must bring their gendered historical self into the process and remain accountable to participants (Denzin, 2015; Smith, 2021). Second, critical theory must be locally grounded and not treated as if it has “universal characteristics that are independent of history, context, and agency” and place (Smith, 2000, p. 229). This allows for context-specific understandings of success, failure, emancipation and oppression to emerge.

These suggestions of a materially informed strand of critical work echo the discussions around the ontological turn in Chapter 2, Section 2.6 (Flemmer et al., 2024). They discard the dualistic Western ontology that views nature as ‘dumb matter’ and foregrounds worldviews that see nature as brimming with real agents and inter-relationalities (Nadasdy, 2007). Environmental conflicts are thereby understood as ontological politics or struggles over knowledge production and asymmetries of power (Flemmer et al., 2024).

5.3. The Research Framework

Carter (2010) presents the research framework as comprising at least three elements—epistemology, which refers to the theory of knowledge—a way of understanding and explaining how we know what we know” (Crotty, 2020, p. 2); methodology as “the study—the description, the explanation and the justification—of methods” which are the actions one takes to gather material to generate knowledge (Kaplan & Wolf, 1998, p.

18); and methods which refer to the specific techniques used to gather and analyse data.

The preceding section outlined the epistemological (materially-informed social constructionism) foundations of my framework. This section introduces the methodological elements and the methods through which different kinds of data were generated and analysed. This thesis adopts an ethnographic enquiry situated within a single, in-depth case study of the fisher struggle for the Ennore-Pulicat wetlands.

Case study is an apt design for this research as it enables an intensive, contextually grounded examination of complex social and ecological processes as they unfold across historical and contemporary moments. Its strength lies in its capacity to trace how meanings, relationships, and power dynamics take shape within situated contexts rather than in controlled or abstract settings (Tellis, 1997; Yin, 2003). The case study, thus, provides a structural frame through which ethnography is conducted. It allows for multiple sources of evidence—observations, field notes, interviews, archival records, and media materials—to be brought into conversation to generate a composite understanding of the phenomenon under study (Berg & Lune, 2017). The approach is particularly suited to a materially-informed social constructionist epistemology, as it accommodates relational, processual, and place-based ways of knowing. Framed in this way, the case study is more than just a site of investigation; it is a methodological strategy for understanding how knowledge and power, and meaning and matter are co-constituted—in the struggle for the Ennore-Pulicat wetlands in this study.

5.3.1. Case Study

The case study occupies a distinctive position within qualitative methodologies because it brings together theoretical reflection and empirical depth to explain how complex social and ecological processes unfold in real-world contexts (Berg & Lune, 2017; Brown, 2008; Tellis, 1997; Yin, 1994, 2003)⁴³. Its central purpose is to answer how and why questions about contemporary phenomena that cannot be controlled or

⁴³ Case studies are not an exclusively qualitative method. Yin (2003) clarifies that case studies can also be used with quantitative data. See Yin, R. (2003). *Applications of case study research* (2nd ed.). Sage.

meaningfully separated from the circumstances in which they occur (Yin, 1994, 2003). The case study is an effective methodology for holistic, in-depth investigations; it engages multiple perspectives and data sources to reveal detail and meaning from the standpoint of participants, offering a medium to “give a voice to the powerless and voiceless” (Tellis, 1997, p. 2). It is better suited for interpretive, rather than predictive, exercises designed to produce knowledge that is explanatory, situated and relational (Brown, 2008; Stake, 1994).

A case study’s defining feature is its attention to context (Yin, 2003). Rather than treating context as a backdrop, it regards it as constitutive of the phenomenon itself. The case is thus understood as a bounded yet permeable system in which relationships, practices, and meanings emerge through interaction. Yin (2003) emphasises the close relationship between the case and its real-life context, noting that the boundaries between the two are often indistinct and must therefore be studied together. For researchers concerned with material processes, such as those explored in this thesis, this orientation is useful because it permits the tracing of social and ecological entanglements rooted in place. Tellis (1997) notes that “case studies are multi-perspectival”: they consider the voices of different actors and the relations among them, enabling the marginalised to enter the analytic frame. This multi-perspectival quality positions case study as a suitable strategy to examine contestation, subaltern agency, and the politics of knowledge.

Case study methodology has developed through several overlapping traditions. Yin (1994) identifies five components of a case study design—research questions, propositions, units of analysis, data-to-proposition linkage, and criteria for interpreting findings. Stake (1994) differentiates three kinds of case studies—intrinsic case studies (undertaken for the case itself), instrumental case studies (where the case illustrates a broader issue), and collective case studies (comparative designs). Berg and Lune (2017) identify two essential elements common to all case studies: they employ multiple methods and draw from multiple sources of data; and each case is part of a wider social process of which it is one component. These perspectives present case study not as a single method but as a flexible research strategy that may mobilise observation, interviews, document analysis, and other forms of evidence in pursuit of contextual understanding.

Another point of convergence in the literature concerns the role of theory in design. For the study to be guided by clear analytic propositions, theory development should precede data collection (Yin, 2003). This does not imply hypothesis testing in the positivist sense. Rather, it opens up an iterative dialogue between theoretical expectation and empirical encounter, even as it allows researchers to search for causal links, test rival explanations and trace change over time (Brown, 2008; Tellis, 1997). This iterative process enhances validity and enables analytic generalisation, addressing an oft-cited criticism of case study that its results are not applicable in real life (Tellis, 1997). Analytic generalisation refers to the extension or refinement of theoretical understanding rather than statistical inference (Yin, 1994).

Case study approaches are also distinguished by their design types. Exploratory studies probe emerging questions or identify variables of interest; descriptive studies provide detailed accounts of phenomena; explanatory studies seek to clarify causal relationships (Yin, 1994). Within these categories, single-case designs are chosen when the case is critical, extreme, or revealing, while multiple-case designs aim for replication logic and patterns across cases. Stake's (1994) instrumental case study is similar to Yin's explanatory type but emphasises interpretive depth over replication. The flexibility to move among these orientations allows researchers to adapt design choices to the epistemological and practical demands of the inquiry.

Observing that disciplinary conventions often privilege and position positivist replication over interpretive or reflexive models, Piekkari et al. (2009) argue for methodological pluralism and for making explicit the ontological and epistemological commitments that inform design choices. The case study, thus, is not merely a design logic but an epistemic stance in favour of contextual interpretation, reflexivity, and theoretical openness.

Despite its interpretive power, the case study method is not without criticism. Common concerns include limited external validity, potential researcher bias, and the difficulty of drawing general conclusions from a single instance. As discussed earlier in this section, the latter concern was countered by clarifying that case studies seek analytic rather than statistical generalisation (see Tellis, 1997). Methodological rigour, achieved through clear definition of units of analysis, triangulation across data types, and

transparency in documentation, is essential to strengthen credibility and validity (Yin, 2003). Another crucial requirement for reliability and trustworthiness is reflexivity, or a transparent acknowledgement of the researcher's positionality and interpretive role (Berg & Lune, 2017). When these principles are applied, case study research meets contemporary qualitative standards of credibility, dependability, and validity.

In summary, case study research is both a design architecture and a mode of inquiry. It structures the gathering and integration of multiple forms of data while demanding interpretive engagement with context and attentiveness to the co-production of knowledge between researcher and participants. Its strength lies in enabling a contextual, multi-layered understanding of complex processes that unfold across time and space. The flexibility of the approach allows it to integrate observation, documentation, and reflexive interpretation within a coherent framework—qualities essential for research that examines how social worlds and material ecologies mutually shape each other. For these reasons, the case study offers a methodologically and epistemologically apt approach for this project. The following section details how this framework is operationalised in the design and implementation of the Ennore–Pulicat case study.

5.3.2. Design and Implementation of the Ennore Case Study

As mentioned above, this research adopts a single, in-depth case study of the Ennore–Pulicat fisher struggle as the framework for ethnographic enquiry. The case study provides the structural logic that links evidence to the research questions and allows ethnography to operate as a mode of knowing within that architecture. Informed by a materially-oriented social constructionist epistemology, the design treats context not as a backdrop but as constitutive of the phenomenon under study; this enables analysis of the co-emergence of social, ecological, and epistemic processes in place.

Following Yin (1994, 2003), the study is organised as a single case with embedded units of analysis. The overarching case is the struggle to defend the Ennore–Pulicat wetlands, while embedded units include events and episodes, organisational practices and movement strategies, and knowledge controversies spanning space, scales, and time.

Moving between these units allows both within-unit explanation and cross-unit patterning to enable analytic generalisations (Yin, 2003).

Triangulation across methods and data sources ensures interpretive depth and validity. Following Tellis (1997), triangulation is used for corroboration, to juxtapose competing narratives and treat divergence as data to illuminate how difference, conflict, and silence reveal underlying power relations. Chronological reconstruction of events establishes sequences and turning points, while pattern-matching and explanation-building are used to refine emerging interpretations.

Ethnographic immersion—as an activist-researcher—over more than a decade provides longitudinal insight into how actors, institutions, and ecologies interact. Reflexive memoing, careful documentation, and the maintenance of a transparent chain of evidence (Yin, 1994) strengthen reliability and ethical accountability. Long-term solidarity with fishers demands attention to representation and participant safety. These concerns are addressed through negotiated consent, anonymisation, and a stance of epistemic humility. These topics are covered in greater detail in the following section on ethnography. Overall, this design enables an empirically grounded and theoretically generative understanding of how dispossession, ignorance, and resistance are materially and discursively produced in the Ennore–Pulicat wetlands. The following section traces the conceptualisation of ‘solidarity ethnography’ as an approach that is appropriate for this thesis.

5.3.3. From Classical Ethnography to Solidarity Ethnography

Ethnography’s classical form emerged within colonial and functionalist anthropology as a tool for describing social life through sustained observation (Lester, 2016). Pioneers such as Malinowski (1922/2014) sought “objective” accounts of cultures from which they remained detached observers. Even later interpretive approaches, like Geertz’s (1973) “thick description,” continued to privilege the ethnographer’s authority to interpret meaning. This model assumed a hierarchy between knower and known, producing what Linda Tuhiwai Smith (2021) later identified as “research through imperial eyes” (p. 82)—a regime of knowledge that extracted and classified other worlds while erasing Indigenous ways of knowing.

By the late twentieth century, critiques from feminism (Haraway, 1988; Harding, 1987), post-colonialism (Said, 1978; Spivak, 1988), and social movement studies exposed the discipline's entanglement with colonialism and domination, and began unsettling this detachment. Engaged ethnography (Kirsch, 2010) arose from recognition that communities are not passive subjects but collaborators and co-producers of knowledge. Engagement signified not advocacy from above but an epistemic repositioning: an ethnographer's responsibility to work *with* rather than *on* social movements. This shift resonated with feminist standpoint theorists (Haraway, 1988; Harding, 1987, 1995), who argued that knowledge from subjugated standpoints offers stronger objectivity than the pretence of neutrality.

Building on this, activist and militant ethnographies (Deschner & Dorion, 2020; Graeber, 2004; Juris, 2007) rejected the spectator position altogether and extended the 'working-with' approach. Juris's (2007) notion of militant ethnography called for deep political participation, embodied practice, and reflexive collaboration; it involves actively organising "actions and workshops, facilitating meetings, weighing in during strategic and tactical debates, staking out political positions and putting one's body on the line" (Juris, 2007, p. 165). Militant ethnography reflects "methods practiced by activists themselves" and "generates practical, embodied understanding" through shared risk and experience (p. 166).

Similarly, activist ethnography involves the researcher locating themselves inside the object of study and generating knowledge through open reflection on one's insider positionality (Deschner & Dorion, 2020). Such positionality blurs the line between ethnography and autoethnography (Haynes, 2011; Doloriert and Sambrook, 2012, as cited in Deschner & Dorion, 2020), allowing for levels of reflexivity normally associated with autoethnography (Deschner & Dorion, 2020).

Parallel to these developments, decolonial scholarship re-theorised the politics of knowledge production. Smith (2021) called for methodologies that "decolonise" by recognising Indigenous people as epistemic agents rather than data sources. Mignolo (2009) calls for "epistemic disobedience" (p. 159) or the refusal to accept dominant systems of knowledge while Escobar (2016) advances the notion of a pluriversal world with multiple ontologies rather than a single universal reality. These pressures have

compelled ethnography to be reflexive, relational, and accountable to those whose worlds it represents.

This intellectual trajectory—from classical ethnography’s detachment to engaged, activist, and decolonial forms—marks a progressive politicisation of ethnographic practice. While activist and militant ethnographies provide valuable models for politically engaged research, they are not without tensions that become visible in long-term, unevenly empowered collaborations such as those in Ennore. Both approaches foreground participation, alignment, and the dismantling of hierarchies between researcher and researched. Yet their emphasis on immersion, action, and insider identification can obscure the delicate negotiations of distance, voice, and responsibility that define solidarity work in deeply unequal contexts. Activist ethnography’s call to work “within” movements (Deschner & Dorion, 2020, p. 205) presumes a level of shared risk and decision-making that may not always be ethically or politically feasible for external allies. Similarly, militant ethnography’s valorisation of embodied participation (Juris, 2007) may inadvertently privilege visibility and action over attentiveness, care, and reflexive restraint. My own field experience in Ennore revealed that ethical solidarity sometimes demands an ‘ethical standing back’ rather than a “deep hanging out” (Geertz, 1998, p. 79), listening rather than speaking, enabling rather than representing, and restraint not advocacy. These tensions prompted the need for an extension to activist ethnography—what I term solidarity ethnography—an approach rooted in humility, reciprocity, and hyperlocal accountability.

5.3.3.1. *Solidarity Ethnography*

My first visit to Ennore as a place and first conversation with fishers from the inland fisher village of Sivanpadaiveethikuppam occurred in 2008. In December 2009, we organised the first ever “caste and environment” toxic tour for city youth, taking them through the wetlands and industrial badlands of Ennore and Manali.

In 2013, fisher representatives from three Ennore villages—Kattukuppam, Mugatwarakuppam and Sivanpadaiveethikuppam—tentatively approached the Vettiver Collective for support in their struggle against state-led industrialisation of the tidal wetlands. After more than six months of mutual evaluation, we committed to working

alongside one another to protect and rehabilitate what remained of the wetlands, and *Kaḷa-p-paṇi*—field work—began in earnest.

My research at the Ennore-Pulicat field site has unfolded in two overlapping phases: first, from 2009 to present as an activist-researcher and second, from 2023 to present as a researcher-activist. The activist-researcher phase intensified after 2013, and involved immersive learning through observation, listening to and questioning elders during boat-rides and village visits, interviews and focus group discussions. Alongside this ethnographic immersion, my colleagues and I systematically gathered documentary data: maps, environmental impact assessments, detailed project reports, scientific studies, news articles, and policy documents. We also accessed licences and monitoring records through India's Right to Information Act, 2005.

From 2015, this learning process became reciprocal as we facilitated sessions with men, women, and youth identified by the villages, helping them interpret the legal, scientific, and policy bases of industrial developments in Ennore. Public-facing campaigns and solidarity mobilisation followed through the Save Ennore Creek Campaign.

The second phase of research—as researcher-activist—began in February 2023, with my enrolment in the PhD programme at the University of Waikato. Both phases employ elements of activist ethnography (Deschner & Dorion, 2020) and militant ethnography (Juris, 2007). These are two variants of “engaged ethnography” that negotiate research-action, personal-political, insider-outsider, activist-academic continua (Rasch & van Drunen, 2017, p. 23).

While activist and militant ethnographies emphasise shared struggle and political alignment, solidarity ethnography—which draws from my experiences as an activist and during PhD field research—additionally emphasises positional humility, relational accountability, and a hyperlocal ethics of care. My use of the term highlights three distinctive aspects. First, it is shaped by the principles of solidarity (humble, deep and slow solidarity) and by the personal and organisational background of the activist(s)—myself and the Vettiver Collective, in this case. These principles were developed over a 25-year period spanning my time spent as a solidarity worker. Second, it represents a

solidarity that supports local struggles while navigating deep asymmetries in power. Third, solidarity activism (and ethnography) requires consciously balancing intimacy with, and distance from, the subaltern communities one works alongside. This is necessary for two reasons: One, to ensure that local voices and leadership are heard and acknowledged as clearly distinguishable from those of solidarity workers; two, to counter the tendency in Tamil Nadu and India more broadly to discredit subaltern struggles by labelling them as externally instigated. Solidarity ethnography, therefore, demands openness among collaborators about the risks of specific actions, and respect for boundaries around what is feasible, safe and desirable for different actors. Grounded in humble, deep, and slow solidarity, it reflects the specific demands of solidarity work in contexts where proximity, complicity, and political risk define the scholar-activist role.

5.4. Data: Sources, Collection and Analysis

Ethnography draws on multiple sources of information. This study relies on over a decade of personal involvement in the struggle, being in the field and with the research participants. This is complemented by other data types: transcripts of in-depth interviews, including those carried out for the thesis, field notes, recollections of conversations, and documents including audio-visual material (See Table 5).

Fieldwork, carried out in two phases—December 2023 to February 2024, and December 2024 to January 2025—was guided by my research questions, which informed a preliminary chapterisation organised around three themes—erasure, emergence or resistance, and transformation. These themes helped focus data collection on events most relevant to my questions.

Given the 50-year (1970 to 2020s) arc of the struggle, the data universe was vast. To ensure relevance, I first mapped the struggle trajectory with village elders to identify milestones. Data collection then concentrated on events for which multiple sources were available (interviews, official documents, campaign archives, maps, media coverage). This multi-sourced approach enabled both nuance and triangulation.

Table 5

Data sources and types

Interviews/Meetings/FGDs			Documents		Media
Fishers and non-fisher Ennore residents	Activists and Academics	Officials (In-service/retired)	Government	Non-government	
13, including 3 women, from 5 villages 1 focus group discussion 3 non-fisher Ennore residents, including 2 women 3 community- or Save Ennore Creek Campaign (SECC)-organised public meetings, including a women-only panel discussion All residents are named in line with their request to be identified.	8 activists, including a senior labour organiser from Ennore, four activists associated with Save Ennore Creek Campaign, and three prominent state-level activists. (All activists are named in line with their request to be identified.) 2 academics 2 lawyers (anonymised and referred to as “a lawyer”)	5 2 women, 3 men (2 serving; 3 retired) (anonymised and referred to as senior bureaucrat etc)	1. Court orders 2. Court reports 3. Government Orders 4. Policy Notes 5. EIA reports 6. Minutes of meetings (licensing, public hearings) 7. Documents, maps from state archives	1. Reports and studies 2. Press releases 3. Photos and films, including music video 4. Transcripts of interviews gathered as part another project 5. Pamphlets, petitions and representations to government authorities	Media coverage mentioning Ennore between 2013 and 2017 Other media artefacts Coverage around key events

Note. Historical documents from the Tamil Nadu State Archives were obtained as part of a collaborative British-academy funded project. See Bremner, L. 2024. *Reimagining the Good City from Ennore Creek*. University of Westminster. <https://doi.org/10.34737/wq13v>

5.4.1. Interviews

The interviews took the form of reflexive dialogues with participants or conversations with a purpose (Burgess, 1984, as cited in Mason, 2002). Transcripts, field notes and recollections provided “thick descriptions” (Geertz, 1973, p. 312) shaped by deep contextual knowledge of Ennore’s cultural and political landscape.

Participants were selected based on their relevance to the research questions. They included:

- Fishers: 13 in-depth interviews (including three women) from five villages; two interviews involved paired participants to capture complementary perspectives. One focus group discussion was also held in Sivanpadaiveethikuppam, one of three villages involved in the struggle for the wetlands.
- Officials: five senior bureaucrats (three men, two women; two serving, three retired). A sixth planned interview, with a former district collector, did not materialise—possibly due to earlier confrontations during my activist phase.
- Activists and academics: eight activists (including a senior labour organiser from Ennore, four associated with the Save Ennore Creek Campaign, and three prominent state-level activists), two academics, and two lawyers familiar with the fisher-led litigation.

The interviews were conducted during two fieldwork phases (November 2023 to March 2024, and December 2024 to January 2025). Selected interviews were transcribed from Tamil to English by a paid translator, while others were transcribed by me. Transcripts from the external transcriber were checked against recordings, corrected, and refined through multiple readings.

5.4.2. Documents and Electronic Content

Over a hundred documents drawn from governmental, non-governmental, corporate and media organisations provided crucial insight into both official/industry perspectives and activist/campaign framings. Sources included:

a) **Governmental and corporate:** court orders, government orders, EIA reports prepared for corporate bodies by consultants, policy notes, licensing minutes, and

maps. Some were obtained from the Collective's library; others through the Right to Information Act (2005).

b) **Non-governmental:** complaints and representations to government, press releases, campaign material, reports and op-eds, documentaries and videos, interview transcripts, and archival records. Historical records from the Tamil Nadu State Archives were accessed through a British Academy-funded collaboration (Bremner et al., 2024)

c) **Media artefacts:** Media content for specific period was analysed to answer two questions: Did the fisher-activist campaign create space for fisher voices to be heard? How did media coverage of Ennore change after the December 2015 floods? To answer this, a time-bracketed (1 January 2013 to 31 December 2017) Google search was performed for the keyword "Ennore", and all English language articles from print and online media were collected for analysis. Blogs, and TV and radio news were excluded. A total of 97 results, including 37 during pre-flood years and 60 during post-flood years were analysed. The results were categorised as environmental and other stories, and by date of publication—before December 2015 (pre-flood) or during and after December 2015 (post-flood)⁴⁴. Each environmental article was carefully read and a count generated for the number of articles mentioning fisher voices, non-fisher activists and others.

5.4.3. Data Analysis

This research centres both the ethnographic data of subaltern resistance and my own positionality—first as an activist-researcher, and later as a researcher-activist. Instead of a purely inductive approach that brackets theoretical preconceptions, I employed an iterative and dialectical method—an abductive analysis aimed at building theory (Timmermans & Tavory, 2012). This analytical approach begins from the researcher's situated understanding within the social world but gains rigour through systematic practices of revisiting data, questioning taken-for-granted assumptions, and exploring alternative framings of the case. Abductive analysis turns the researcher's position and insights into a starting point for theory-building, while maintaining reflexivity and

⁴⁴ On 3 December 2015, Chennai made international news after torrential rains resulted in one of the worst flooding incidents affecting the city.

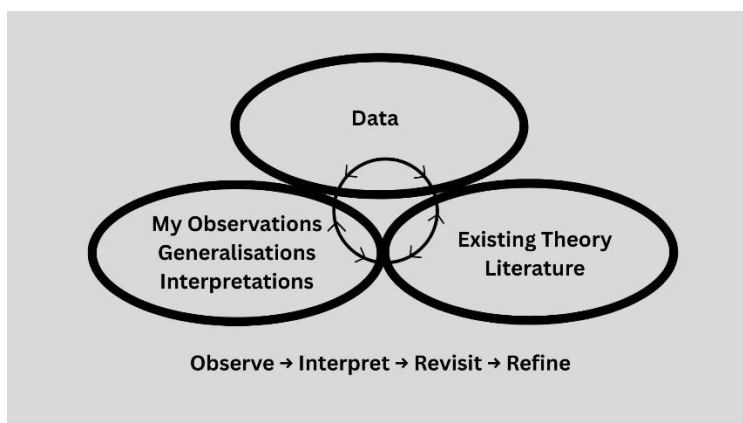
openness by repeatedly challenging initial interpretations. A thorough review of relevant literature and concepts was undertaken to develop frameworks suited to address my research questions, preparing the ground for an iterative dialogue between theoretical expectation and empirical encounter.

With the case of the subaltern struggle for the Ennore wetlands as the unit of analysis and the research questions as my guiderails, I closely and repeatedly studied the data to identify the embedded units of analyses, including events and episodes, organisational practices and movement strategies, and knowledge controversies. These now appear in my three data chapters 6, 7 and 8 organised under the themes of surviving erasure, resisting erasure and transformative resistance, where the data is viewed through the conceptual frameworks—epistemology of resistance, and political ecology of transformative resistance.

My analytic process unfolded as a three-cornered dialogue between data, personal observations and interpretations, and existing theory where observations and meanings are placed in conversation with experiences from the field, other data sources, and research participants and their interpretation iteratively refined (See Figure 5).

Figure 5

Three-cornered dialogue for abductive analysis



Note. Author's own representation drawing from Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological theory*, 30(3), 167-186. <https://doi.org/10.1177/0735275112457914>

5.5. Human Research Ethics

Approval for conducting participant interviews and focus group discussions was obtained from the Human Research Ethics Committee of the Division of Arts, Law, Psychology and Social Science, University of Waikato. The guidelines of the Committee—to work respectfully with and represent the participants fairly—were followed while conducting the interviews and discussions, and using their observations in the thesis.

Informed consent was obtained for all interviews and focus group discussions, by presenting them with a copy of the information sheet—in Tamil or English as required—and a consent form. Some community members preferred to offer their oral consent, which was audio recorded at the start of the conversation. All written consents were obtained on an English consent form after handing over or reading from a printed Tamil translation of the consent form.

Participants were offered anonymity. Some participants insisted on being named and identified, and this choice was honoured. Permission was sought for audio recording the conversation on a digital recorder solely for transcription purposes and for exclusive use as data for thesis and related publications. A selection of interviews, based on my notes from the interviews, were transcribed. Transcriber confidentiality agreement was obtained for transcriptions done by third-party transcriber. All transcripts and recordings are held by me in a personal archive. The Ethics Approval is annexed in Appendix 1, and all documents used during the interview process are in Appendix 2.

This chapter outlined the epistemological, methodological, and ethical architecture guiding this research. Grounded in a materially informed social constructionist framework and operationalised through a single embedded case study, the chapter has outlined how solidarity ethnography translates the principles of humble, deep, and slow solidarity into a reflexive method of inquiry. These approaches enable an analysis that is simultaneously empirical and ethical. The following chapter, *Surviving Erasure: Enduring as Resistance*, turns from methodology to lived experience, tracing how Ennore's fishers confront and endure the systematic silencing, displacement, and ecological erasure that structure their everyday struggle.

Chapter 6

Surviving Erasure: Enduring as Resistance

Near what is now the Conveyor bridge, there was a *kalvai* (canal), *Thodapakuchi kalvai* (Broomstick canal). It was a superb canal, great for fishing, and used by salt-bearing barges to move in and out of the salt pans. One could enter *Thodapakuchi kalvai* and circle back through *Jambadam kalvai*. The entrance is deceptive, through a narrow mangrove channel a few hundred metres long until suddenly you open onto a sprawling, ever-wet *paraval* (backwater) that we call *Jenjeri*. Unlike the backwater areas with sandy soil which dry up seasonally, *Jenjeri* has clayey mud and seldom dries up. Even when the river has only five feet of standing water, there will be at least a foot of water covering the *Jenjeri*. Fish and prawns enter the sea from the river. But the *Jenjeri* is where life begins. It is from here that fish descend to the river and onwards. We don't fish in the *Jenjeri* except during the monsoons when the river is too deep for setting nets. You know the Chettinad coal yard and the Polymer Park? All that was *Jenjeri*. The sand dredged to deepen the harbour was pumped through *ratchasa kuzhai* (monstrously huge pipes) and dumped on the *Jenjeri* to construct the coal yard, and coal ash was used to fill up the *paraval* for the Polymer park. (S. Kumaresan, Fisherman, Kattukuppam, personal communication, February 14, 2025)

The *Jenjeri* is mostly gone, buried under a 12 metre stack of coal in one place and 2 metres of coal ash in another. Only patches remain—disconnected, degraded and stripped of their former vitality as a fish nursery.

Such lived histories of erasure lie hidden beneath the smooth narrative of Tamil Nadu's Dravidian model of justice- and welfare-oriented liberal capitalism. That model has indeed delivered gains: it has weakened caste hegemony and improved human development indicators. Yet, as this chapter shows, fishers—low in the caste hierarchy and reliant on non-property spaces such as wetlands—have borne the costs of industrialisation and the upward mobility of propertied communities. These erasures highlight a central contradiction of the Dravidian model's social justice agenda that sits

uneasily with its pursuit of capitalist growth, lending the model a distinctly colonial taint.

Stories of effacement like that of the ash- and coal-smothered *Jenjeri* mark every part of Ennore's water-scape. Unearthing them will reveal a chronological continuum of colonisation dating from the early 18th century to the present time. Although fraught and never complete, processes of erasure at the frontier were central to colonisation. To render the frontier a tabula rasa, as "uninscribed earth" (Spivak, 1985, p. 264), specific knowledges had to be silenced and particular ignorances cultivated. Spaces and lives across the frontier needed to be stripped of value, made invisible, cast as savage and unruly, and shown, therefore, in need of taming, domestication and integration into a capitalist economy (Patel & Moore, 2017).

As a site of ongoing internal colonisation, Ennore's frontier-ness persists to this day. Classifying wetlands as waste, denying their wetness, branding non-propertied users as encroachers, and rendering ecologies as blank slates for development reproduce colonial logics, now recast in the idioms of national interest, rational planning and—in Tamil Nadu's case—Dravidian model of economic growth. Seen in Lefebvrian terms, such erasures are central to the state mode of production of space to aid accumulation, and the creation of place- and particularity-effacing abstract space.

Bremner et al. (2025) analyse Ennore's industrial transformation through stories of legality and science in the making of Chennai as a "good city" (p. 1). Turning an ignorance lens to build on this, this chapter traces the logics, modalities, and justifications of erasure by studying official documents—including laws, government orders, Environmental Impact Assessment (EIA) reports and court orders—for what they say and leave unsaid. It then situates these silences with ethnographic data and archival material. I argue that the state strategically deploys omission and ignorance as method. Here, ignorance, including "constitutive silences" essential to maintain power relations (Medina, 2011, p. 16) and "non-accidental omissions" (Foucault, 1977, pp. 134-135) are wielded as instruments of reason and rule (McGoey, 2012). This raises three questions:

- A) What does an ignorance-centred analysis of law and due process reveal about the political processes and limits of liberal, even social, democracy?
- B) What unconventional epistemic tools sustain ignorance and authority?
- C) How is the toolkit of ignorance produced and deployed?

To explore these, I present five sets of stories that highlight distinct dimensions of erasure and the ignorance strategies underlying the production of such absences. The first, based on archival data, traces salt industrialisation from the colonial era to the 1970s. The second relies on participant interviews and government and archival records to trace the modes of erasure accompanying the beginning of fossil industrialisation in Ennore with the establishment of a petroleum refinery and a thermal power plant in the 1970s. The third draws on publicly available material and Right to Information (RTI) disclosures, to focus on neoliberal India and shows how maps, plans, and legal judgements portray the frontier as a “set of absences”—lacking production and civilisation (Rose, 1996, n.p.). Progress is then recast as a move “from absence to presence, from nothing to something” (Rose, 1996, n.p.). The fourth embedded case mobilises evidence from multiple sources—autoethnographic data and interventions, correspondence and reflections from my personal involvement in the case, participant interviews, and archival and documentary sources—to present how fishers have survived the erasure by pollution of their lifeworld. The fifth turns to EIAs, environmental due diligence processes, and the courts, examining them as instruments of promissory politics that demand faith—even blind faith—in science, institutions, experts and the judiciary. A commentary on the nature of the littoral commons that makes it particularly vulnerable to marginalisation and expropriation will precede the embedded case studies to provide context to the sections that follow.

6.1. Littoral Discomfort

Ennore is a patchwork of shifting, binary-defying spaces that are neither water nor land, sometimes one, sometimes the other. The Tamil word *kazhi* means “flow” or “overflow.” The estuary, where sea and river merge with tides and seasons, is *Kadar-kazhi*; tidal marshes are *Uppan-kazhi*; floodplains are *Kazhi-veli*. Life in these “fluid geographies” (Bhattacharyya, 2018, p. 1042) is built around water’s right to flow and wetness’ right to

be. Under the medieval Tamil agrarian revenue system — still influential in modified form—all *kazhis* were classified as *poromboke* (commons), unassessed lands vested in communities for shared use. *Poromboke* were not property: they could not be bought, sold, or built upon.

This non-property status and fluid, in-between character posed a frustrating ontological challenge to Britain's drive to create "acquirable" property. In European landist metrics, wild water was a fearful frontier to be tamed and terrestrialised. An iron-fisted hydrocracy was required not only to discipline tropical wetness but also to overwrite local cosmologies, replacing them with the universal reason of science and the authority of British engineering (D'Souza, 2006). As Horkheimer and Adorno (1981) noted: "What men want to learn from nature is how to use it in order wholly to dominate it and other men" (as cited in Prakash, 1999, p. 5).

C.S. Crole's⁴⁵ 1879 district gazetteer for Madras captured this discomfort with the littoral plains:

The general aspect of the district must be taken to be flat and uninteresting. This is especially the case all along the sea-board, and for several miles inland. It is due partly to the network of backwaters or lagoons, which runs along the coast. First comes a high sandy ridge of blown sand, which forms the shore, then for one, two, or even three miles a shallow salt-water lake. That passed, terra firma begins, but it is generally flat and dreary, and in wet weather, almost impassable, being intersected by rivers and drainage streams, swollen, muddy, and difficult to cross. (Crole, 1879, p. 3)

Crole's disdain for the terrain is in sharp contrast to how local fishers' experience the fecund wetness of the same waterscape:

The water was clean. No dust in the air. Peaceful and quiet. As we waded across the *aaru* (river) and crossed the islets, we would keep snacking on wild fruits—*kaattu kallakkai* (wild carandas plum), *soora pazham* (wild jujube),

⁴⁵ Crole was collector—head of revenue administration and the chief executive—of the Chengalpet district in Madras presidency.

gorikallikai. . you know some call it *konakkai* (manila tamarind), *mundhiri pazham* (cashew fruit). We would set our nets, beach our boats and while our time eating fruit. (P. Mahendran, fisherman, Kattukuppam, personal communication, February 3, 2024)

The rivers and canals so disparagingly described as “swollen, muddy, and difficult to cross” meant something altogether different for Ennore’s fishers. Describing the Kuruvimedu Kalvai—a large mangrove-fringed canal now blocked by a thermal power plant—Kattukuppam fisher S. Kumaresan says: “It was bountiful; plenty of sweet prawns. He would bring back enough for the family that day, and more that my mother would take to the market” (personal communication, December 2, 2023).

Where Crole viewed mud as a nuisance and an obstacle to be overcome, fishers⁴⁶ reverently referred to the river’s muddy sediments as *Uyir Seru* (living mud) and the less productive sandy river bottom as *Tharai* (floor). Alive and vibrant, the wet *Uyir Seru* is a perennial powerhouse driving ecological energy flows that sustain carboniferous life in the wetlands and beyond. *Seru* is not spread uniformly through the river and backwaters. Generated through an intimate embodied encounter with the river and its sediment through countless hours of wading and diving to set and retrieve fishing nets, Ennore fishers’ benthic mind-map of the river is nuanced:

Noor adi section has sandy floor, not great for prawns. *Sandi Koil* too. *Manjaa Machine* has mud. *Jallikuzhi* is full of old, dead oyster shells. One has to be careful. They will slice your feet. My favourite is *Mun Puliyamaram*. It has just the right mixture of sand and mud. No one that goes there returns empty-handed. (P. Mahendran, personal communication. February 3, 2024)

Carpeted with thick deposits of wet and productive *Uyir Seru*, places like the *Jenjeri* described at the beginning of this chapter are treasure-houses. Ironically, atop this

⁴⁶ This chapter focuses on the experiences of Pattinavar fishers. Despite being from the lower rungs of the caste society, Pattinavar exercise relatively more agency than the Paruvatharajakula, Dalit and Irular fishers. The point, however, is that the experiences of Ennore’s Pattinavar and other fishers exposes certain fault lines in the social justice narrative of the Dravidian model.

living sediment now sits a coal stockyard—dead carbon that fuels Tamil Nadu’s modern economy but suffocates the river’s vital energetics.

Crole’s manual also reflects a perverted view of fishers—the “Mussulmans and low caste Hindus”—for fishing “recklessly...leading to wholesale destruction of fish” and for their alleged idleness: “No man willingly accepting work if he thinks he has a chance of catching a few fish” (Crole, 1879, p. 12). These allusions to a certain barrenness or hostility of place, a lack of Protestant work ethic among its people or the need for improvement of both were not innocent observations (Sutton, 2009). Such contempt for land and people justified branding them as ‘waste’ (Bhattacharyya, 2018; Gidwani, 1992; Raman, 2018), enabling appropriation by subterfuge of what could not be acquired lawfully.

Lands with titles or identifiable owners were valued as tradable property. All else—lands, waters and in-between ecologies—were categorised as one of three waste ‘lands’—assessed waste, unassessed waste and *Poromboke*⁴⁷ (Raja, 2013). The East India Company vested these in itself. Estuaries, backwaters and transitional zones were thus branded as waste, demarcated through Western cartography, and appropriated. This accomplished two things: the water-lands were fixed terrestrial two-dimensional property measurable in hectares or acres; and most commons became state property.⁴⁸ Diverse usufruct rights were ignored or acknowledged only in disparaging terms, glibly dressing ignorance as knowledge. The following sections reveal how these kinds of ignorance—informed by unseeing and seeing wrongly—undergird the waves of colonisation and mal-transformation of the wet worlds of the Ennore fishers.

⁴⁷ Assessed waste include cultivated lands which have been left fallow or lands yielded by cultivators; unassessed waste are lands considered unfit for cultivation that have not been classified or assessed; *poromboke* are unassessed lands set apart for public or communal purposes. Sometimes, revenue records may also refer to certain assessed and unassessed wastes as *poromboke*. Barring certain *poromboke* spaces that are under the control of the village, all three classes of wastes vest with the government.

⁴⁸ In 1858, the Crown replaced the Company as rulers in India. Under company rule, under various processes of lands settlements, the state appropriated free-hold rights over unassessed lands, including wetland commons, not vested in village communities. These rights were transferred to the Government of India in 1858 leading to *Poromboke* (commons) lands being referred to as a Government or *Sarkar Poromboke* or Government lands.

6.2. Case 1: Blinded by Salt

Ennore's first wave of industrialisation began in 1805,⁴⁹ when the East India Company declared salt a state monopoly. Wetlands suited for salt production were identified. By re-labelling them as prospective salt 'lands,' they were semantically desiccated before being drained and converted into pans. These were fed by canals bringing in brine from the tidal channel, with larger canals excavated for transport of labour, goods and salt. In 1806, a canal to reach salt to the city was cut through "strips of land and shallow backwaters from Madras to Ennore, a distance of 11 miles" (Rao, 2015, n.p.).

Not much is known about how fishers reacted to early colonial transformation of their wetlands. However, anecdotal evidence points to some tension. A news digest prepared for the Home department of the Government of India in February 1942 reports on an unfortunate incident (Government of India, 1942b):

There has been trouble for some days between coastal watchers and fishermen of Ennore. . . owing to the watchers interfering with the fishing in the backwaters at night. A Havildar and some sepoys who were escorting the patrol to their post that morning were surrounded by the villagers who threw stones at them. The Military were forced to fire five rounds in all on two occasions as a result of which one woman was killed and four persons were injured.

Such flare-ups, however, were rare, according to an elderly salt worker, who pointed out that while the central government—owner of the salt pan lands—exercised strict control over access to salt pans, fishers routinely trespassed, but were 'tolerated' in the channels; minor disputes were resolved amongst themselves (personal communication, April 5, 2019). Several co-terminous events, including the setting up of a polluting coal-fired thermal power plant in the 1970s—discussed in the next section—hurt Ennore's salt works, triggering its decline.

⁴⁹ The Madras Regulation I of 1805 brought all salt pans and salt lands under the control of the East India Company, a move done to finance the setting up of courts following the Permanent Settlement in Madras Presidency in 1801. The Settlement was a mechanism by which land was parcelled as permanently owned property with identifiable title holders in order to aid the collection of land revenue and convert land into a tradable commodity.

By the mid-1960s, however, salt's prospects in post-independence Madras state plateaued, as household use was saturated and industrial demand was lacking. In its industrial developmentalist mode, the state began identifying additional 'lands' for salt production, to be offered as captive pans for salt-based industries like soda ash and caustic soda (Government of Tamil Nadu, 1967).⁵⁰ Archival records of this quest for 'lands' reveal the state's values and approach to the littoral.

In 1966, M/s EID Parry, a Chennai-based private sector company, sought 7,000 acres in Ennore for captive salt pans for a proposed soda ash factory. Of this, 3,000 acres were Government of India-owned salt pans. The remainder—including backwaters, canals, river stretches and other wetlands—were sought from the state government. The company's representation to the government seeking 'lands' for captive salt pans, preserved in an interdepartmental letter, justified its choices:

. . .most of the land selected by it is *marshy waste* which has been *lying unutilised* all these days and are *submerged under saline water* for about seven months a year. There is *no freshwater* in the locality with which the land can be irrigated for cultivation purposes. About 560 acres among these lands are, as you know, classified as grazing ground *poramboke*. But it is understood that *no grass or green pasture ever grows* in these patches of land now. . . Similarly, there is an extent of about 95 acres in Edayanchavadi village under the category 'river poramboke'. Most of the area under this classification, it is said, is high level land on the banks of the river, which is marshy in nature and is *unfit for cultivation*. The lands classified as '*backwater poramboke*', on the other hand, lie mostly along the backwater canal bank west of Buckingham canal, and are *low-lying marshy lands*, generally submerged during high tide and also during the rainy season and are *unfit for any purpose* other than for storage of sea water for production of salt. . . The company's idea is to reclaim and develop all these lands including the river porambokes, assessed wastes, grazing ground porambokes and backwater

⁵⁰ All data from the Tamil Nadu State Archives were gathered by Bhavani Raman, Aditya Ramesh and V. Gajendran as part of a collaborative research project funded by British Academy Knowledge Frontiers International Interdisciplinary Research Grant (2022-2024), no. KF6220264 (Bremner et al., 2024).

porambokes, for the storage of sea-water required for the manufacture of salt.

(Government of Tamil Nadu, 1967, pp. 30-31. Emphasis added)

Elsewhere, the company complained that the Araniar river “takes too many turns” and should be contained. In Andarmadam, another area of interest, one of its three branches was deemed “weaker” and recommended for “obliterat(ion),” while the other two were to be maintained “in proper condition to provide drainage and flood system” (Government of Tamil Nadu, 1967, p. 6). A mechanistic knowledge of nature had become entrenched.

Concerned about the diversion to other uses of grazing grounds and cultivable wastes,⁵¹ the Board of Revenue tasked a District Revenue Officer to ground-truth the application (Government of Tamil Nadu, 1967, p. 22). With few exceptions, the government accepted the company’s proposal, adopting its valuation vocabulary. Nowhere in these exchanges are fish, fishers, or fishing mentioned. Here, a shared ignorance—between company and state—masqueraded as geographical knowledge. This situated geographical ignorance, a selective perception shaped by the perceivers’ identities and priorities (Tuana, 2006), erased other realities and rendered them irrelevant. It defined the values by which geography was judged and reshaped space to fit industrial projects.

Terms like saline, tidal, marshy, low-lying, inundated, lacking fresh water or unsuitable for agriculture or grazing were framed as universally undesirable traits, that could be overcome by ‘development’. This terra-centric view ignored the amphibious realities of littoral societies (Pearson, 2006), who thrive in precisely such ecotones. Even within the terracentric framework, a hierarchy of knowers prevailed. Saline marshes considered unsuitable for agriculture were cultivated by landless lower caste communities.

However, their labour and claims—though terrestrial—carried little weight.

Commenting on the farmers’ use of a portion of a 250-acre grazing ground requested by Parry, the District Revenue Officer wrote:

⁵¹ The diversion to other uses of grazing grounds and cultivable wastes was generally prohibited, and required the Board of Revenue to follow procedural due diligence to establish that no other viable options were available, and that such diversion – if allowed – would not adversely impact the current and future needs of the village.

The middle portion is completely saline and low-lying and there is no pasture. Further, an extent of 26.21 acres is encroached upon by 74 persons by way of cultivation and forming bunds. About 200 acres may be leased out after eviction of encroachments (Government of Tamil Nadu, 1967, p. 64).

Terraforming and enclosures at the developmental frontier require not just derogation of lands and waters but also delegitimation of its uses and users. This discursive move hinges on the elastic power of the word “encroach,” which can be used to delegitimise the presence of water as easily as that of people. Merriam Webster defines “encroach” as “to enter by gradual steps or by stealth into the possessions or rights of another” (*Encroach*, n.d.). The space in question was a littoral commons with fluid boundaries where salt and freshwater mingled; neither was an intruder. Grazing ground *poromboke* is typically vested with the village, not the state, and its use by landless commoners is accepted norm. Yet, once framed as encroachment, the government—acting as an omnipotent land-developer—could recommend eviction of farmers and diversion of this communal resource to a corporate entity. Such diversions are inevitably justified by invoking the greater common good and positioning acquisition of lands—even for private parties—as acts serving public purpose. The language in a government order for acquisition of lands in Ennore for a fertiliser project by the same company, EID Parry, offers a case in point.

Setting up of industries should be viewed against the background of general economic development of the country. A licensed industry fulfils specific purpose even if it is in the private sector such as producing goods (or services) needed by the people. Further, ammonium phosphate is an important chemical fertiliser. . .The manufacture of the fertiliser will contribute much towards food production and the economic development of this state. (Government of Madras, 1961)

Public purpose was a powerful trope that could be mobilised even to evict wetness from wetlands. Pejoratives such as encroach or marshy, alongside celebratory phrases like economic growth, public purpose, and nation-building reflected a dominant ignorance at play. The former delegitimised and diminished marshes and their users by erasing their human and non-human value; the latter redeemed the state’s spatial ambitions,

recasting local practices as backward or illegitimate, and local ecologies as obstacles to or resources for national progress. Ignorance here was not just a passive non-knowing; it was structured and political and critical to the subjugation of subaltern knowledge claims and production of dominant and 'legitimate' knowledge. With its worth thus diminished, the wetland was co-opted into the nation-building project. Yet, the vision of converting vast salt marshes into captive salt farms for the chemical industry never materialised for reasons that are not clear. In their place, though, a far deadlier future awaited Ennore's backwaters.

Meanwhile, fishers survived—even thrived in—the transformations wrought by salt panning in the backwaters. As fisher elder D. Selvarajan pointed out, salt panning did not harm fish; rather the canals criss-crossing the pans were colonised by mangroves that provided a safe breeding ground for fish, prawn and crab. And wherever the fish were, the fishers followed, even if it meant trespassing into central government-owned salt pans. The spatial logic of salt 'lands' ignored the littorality of the space the pans occupied by using law and artificial boundaries to cleanly separate the wet and fluid commons from the owned spaces carved out of them. Dominant ignorance of this kind relies on an "inverted epistemology" (Mills, 2022b, p. 18) and a "logic of purity" that erases multiplicity by "categorizing, dominating, and controlling the openness of possibilities" (Bailey, 2007, p. 84). Resisting the violence of an inverted epistemology need not entail a re-inversion—asserting and re-inserting what was ignored—as much as it does a subversion. Following Lugones (2003), the resistive logic of impurity urges a defiance of control and categorization by "asserting the impure, curdled multiple state and rejecting fragmentation into pure parts" (as cited in Bailey, 2007, p. 84).

Fishers' acts of trespassing were quiet assertions effected not through confrontation but by repeated enactments enabled by the curdled, porous, fluid and in-between nature of the littoral. As quintessentially littoral communities, Ennore's fishers challenged the erasive tendencies of the state's spatial representation of the wetlands by their spatial practices of commoning. Where re-inversion would have required a counter-representation of space—a monumental task for subaltern actors—quiet commoning presented a practical option to curdle the space rendering it a commons in practice and owned only in a legal sense.

Commoning through trespassing—a process Feola (2019) referred to as “unmaking” (p. 979)—was central to how fishers endured the erasures of salt industrialisation, and created room for more open forms of resistance and alternatives. The radical tendencies of such everyday acts of subversion cannot be taken lightly. This is what Foucault (1994) called a “practice of liberty” (p. 245). Such practices, though unable to release fishers from the structures that confined them, allowed them to endure, imagine and enact different ways of living within those very constraints.

The next section traces salt monoculture’s decline and the rise of electricity generation in its stead.

6.3. Case 2: In the Name of Power to the People

The 1950s marked the onset of the Great Acceleration, with energy and related material consumption surging as post-colonial nation-states industrialised and urbanised (Steffen et al., 2015). Starting from a low base of 1.3 GW of electricity generation capacity on the eve of independence, India’s generation roughly trebled and trebled again over the first two decades (Central Electricity Authority, 2024). Where electricity was used as part of the “tools of the colonial enterprise” during the pre-independence period, expansion of generation capacity was aimed at national development, modernisation of agriculture and industry, and improvement of living conditions in the Nehruvian era of planned development (Rao & Lourdasamy, 2010, p. 29; Rao, 2010).

Elizabeth Chatterjee (2020, p. 3) distinguishes the fossil capitalism of colonial powers from the “fossil developmentalism” of post-colonial Asian electrification. The latter—exemplified by the Nehruvian use of electricity as a tool of human development—viewed electrification as a state-led moral project and entitlement, distinct from the commodification logic of “fossil capitalism” (Altvater, 2006, as cited in Carter & Zalik, 2016, p. 66).

Ennore became an early precedent-setting site of this fossil developmentalism. It hosted India’s first coastal, coal-based power plant, despite a national policy that until then permitted thermal stations only at pit-heads near coal mines. In the early 1960s, Tamil Nadu lobbied the Union government for an exception, citing strategic advantages:

coal transport via rail and sea, the potential for a captive port, abundant seawater for cooling, and synergies with an anticipated oil refinery (Government of Madras, 1964).

The commissioning of the first 60 MW unit of the Ennore Thermal Power Station (ETPS) in 1970 marked the region's entry into a fossil curse, illustrating how state-led electrification reimagined coastal wetlands as industrial frontiers. ETPS bound Ennore to an influx of fossil infrastructure—power plants, coal yards, ash dumps, and ports—that in turn fuelled hydrocarbon expansion. Salt, once central to imperial projects, receded as fossil developmentalism orchestrated new erasures. Ennore became entangled in global extractive industries, and new forms of ignorance emerged that enabled and sustained blindness to local hardships, pollution, vanishing livelihoods, and declining health of both people and place.

6.3.1. Un-seeing Water

The most obvious realities are often the hardest to see. Social norms and institutional structures shape what is perceived, ignored or disbelieved. Commenting on “white ignorance,” Mills describes an active, resilient, and even militant complex of absent and false beliefs, and distorting or deforming outlooks “not contingent but causally linked to their whiteness” (Mills, 2022a, p. 36). A parallel distortion shaped industrialization in Ennore, where entrenched assumptions and false beliefs prevented planners from acknowledging wetness as a defining feature of local life.

Technocratic ignorance—disguised as knowledge and expertise—played a central role in the state government's spatial vision for Ennore. This inverted epistemological habit was made spatially visible in the state's abstraction of Ennore as a dry, developable ‘land’scape, disavowing the cultural and hydrological realities of wetness. Just as Mills attributes white ignorance to racial positionality, technocratic ignorance can be seen as the epistemic habit of the developmental state—a blindness produced by faith in planning, engineering, and quantification that renders relational ecologies illegible to policy and law. While not reducible to racial domination, this technocratic ignorance reproduced a similar structure of exclusion—one mediated through caste and class privilege and legitimised by the idioms of expertise, reason, bureaucracy, and progress.

Colonial salt-making, though a monoculture that transformed wetlands, and shaped by an early form of technocratic ignorance, was closer to agriculture than to industry and did not unduly disrupt fisher livelihoods. Both salt and fish depend on healthy, flowing salt water and clean air. The mangrove-fringed canals dug for brine circulation and boat movement doubled as nurseries for fish, crab and prawns. Fisher elders recall convivial relations with salt workers and abundant catches in those canals (D. Selvarajan, personal communication, March 6, 2024).

The Fossil Curse introduced a radically different relation to water—one destructive to both salt and fish. Powered by a potent technocratic blindness, the developmental state's planning would remake Ennore's amphibious commons into a landscape of industrial potential that erased older ways of knowing and living with water even as it legitimised new regimes of extraction and enclosure.

In the lead up to ETPS' establishment, interdepartmental debates centred on coolant water drawal, hot water discharge, and ash disposal. In 1965, the Director of Fisheries responded to proposals to discharge ash slurry and hot water into the sea and to draw coolant water from the backwaters, approving all three (Government of Tamil Nadu, 1971). He wrote:

The department has no objection in disposal of the slurry into the sea near Ennore beyond 10 fathoms line. . . There is no objection for drawing cooling water from the backwaters after establishing a permanent connection with the sea at the sand-bar and in letting out warm water back into the sea. I presume that the discharge will not be too hot as to raise the temperature of the sea water considerably. If need be the question of adequate dilution to cool the affluent can be considered at the appropriate time. The effluents may be discharged into the sea only and not into the backwaters. (p. 31)

But powerful actors intervened and plans changed. The Government of India-owned Madras Port Trust objected to the "dumping of flyash into the sea" arguing that seasonal currents "would silt up the fisheries harbour channel [with ash] and possibly the port channel also" (Government of Tamil Nadu, 1971, p. 28). A letter written by the chairman of the Port insisted that ETPS should acquire "low-lying areas for dumping the fly ash. . ."

(p. 37). Curiously, even as the chairman acknowledged the agency of more-than-human actors such as ocean currents, he portrayed “low-lying areas” (wetlands) as passive and non-reactive, revealing the selective manner in which ignorance was wielded in his knowledge claim-making. ETPS engineers then sought 200 acres from the Salt Department to dump ash. Despite objections from a consultant who argued that the ‘land’⁵² was “ideally fit for salt manufacture” (p. 38), ETPS ended up establishing a flyash dyke there.

Warnings against hot-water discharge into the backwaters were also ignored. ETPS secured permission to release 150 cubic feet/second of heated effluent⁵³ into the North Buckingham Canal connecting Ennore backwaters to the Cooum river in Madras city. The Public Works Department, custodian of the river and canal, was enthusiastic, offering to even fund the project. It reasoned that “The discharge from the Ennore Thermal Plant could be advantageously utilised for flushing the [sewage-tainted] Cooum river thereby keeping it clean, and also it will improve the draft” (Government of Tamil Nadu, 1970, p. 15).

In 1969, a petroleum refinery located upstream began discharging oily wastes, triggering a conflict that remains unresolved to this day (See Case 4). Bleak times had begun for Ennore’s fishers as the backwaters and near seas were reconstituted as sinks for city sewage, industrial wastes and ETPS’ hot water and coal ash. Unlike the fisher response of quiet trespassing to salt industrialisation, fossil developmentalism’s erasures were marked by active and visible, though sporadic demonstrations. A major protest in the 1980s⁵⁴ provides a case in point: After “authorities ignore[d] complaints to arrest oil waste discharge by [Chennai Petroleum Corporation Limited],” fishers from Kattukuppam and Sivanpadaiveethi Kuppam blocked the Buckingham Canal using

⁵² The scare quote denotes that what was referred to as ‘land’ was actually wetlands that were turned into salt pans.

⁵³ From 150 cubic feet/second, the total volume of hot wastewater discharge from all the power plants (operational and awaiting commissioning) in the region has grown to 3,139 cubic feet/second (320,000 cu m/hour), according to a 2015 power plant EIA. See “TANGEDCO (2019). Rapid Environmental Impact Assessment for Proposed NCTPS (1x800 MW) Thermal Power Project at Villages Ennore & Puzhuthivakkam, Ponneri Taluk, Thiruvallur District, Tamil Nadu.”

⁵⁴ While a number of elders agreed that they had organised a major protest in the 1980s, there were differing accounts as to when in the 1980s the protest was held.

sand bags (See pull-out art poster titled "Struggles of Ennore" by Benisha in Jayaraman et al., 2024). These protests were not anchored in a long-term strategy but were acts of moral urgency; they called attention to the problem, momentarily forcing visibility (personal communication, December 2, 2023). Yet, they helped fishers endure, assert agency and build strength and support.

The canal blockade drew the attention of the District Revenue Officer—a senior executive in the administration—prompting her to investigate their complaints. Fishers recounted how the officer, shocked and angered by the pollution, rushed to the refinery, threatened them with penal action and directed them to immediately stop discharges into waterbodies (S. Kumaresan, personal communication, December 10, 2022).

The relief was short-lived with pollution resuming after a brief break, Kumaresan recalled. Nevertheless, the protest offered some insights into the power of a well-planned direct action and the contingent nature of such events. Their outcomes are anything but predictable matters of fact. Rather, following on Haraway's notion of naturecultures (2016a), Barad's (2007) theory of intra-action or when viewed from a Latourian perspective, reality reveals itself as a "matter of concern" (Latour, 2004, p. 225)—a dynamic assemblage of humans (fishers, sympathetic government official, company staff), non-humans and artefacts (fish, pollutants, laws and institutions) and more-than-human forces (tides, canal, the material solidity of sand bags).

The story of Ennore's electrification, and the modest, though increasingly visible and active protests it provoked, reveals how erasure operates as a process rather than an accomplished fact—an ongoing attempt to overwrite without ever fully succeeding. The planners' conceived space of industrial modernity sought to impose itself upon the lived space of fisher and salt-worker relations with water; yet, those older spatialities continued to flicker beneath the new order. The spatial practices of ash dumping and coolant discharge materialised this partial abstraction, and in doing so, translated technocratic ignorance into everyday geographies of dispossession. Here, ignorance was not a void of knowledge but a modality of power—an institutionalised blindness that naturalised displacement and normalised pollution. Within this shifting terrain, endurance itself became political. Fishers' spatial practices—the continued inhabitation of damaged waters and their sporadic acts of protest—exemplified a

militant persistence: a refusal to vanish that kept open the possibility of remembering, recirculating and reclaiming erased relations. In this sense, the promise of ‘power to the people’ concealed a deeper logic of planning as erasure, to which the next section now turns.

6.4. Case 3: Planning as Erasure

In February 1991, the Government of India (GOI) issued the Coastal Regulation Zone (CRZ) Notification under the Environment (Protection) Act, 1986 (Government of India, 1986) to regulate coastal development. The Notification divided coastal areas into four zones (CRZ I to IV)⁵⁵ based on ecological fragility and the level of urbanisation. It set rules for each zone and required maritime states to prepare Coastal Zone Management (CZM) plans and maps.

Tamil Nadu produced its CZM plan in June 1996, comprising 30 map sheets for its 1,000 km coastline (Department of Town and Country Planning, 1996). Sheet No. 2 covered the Ennore wetlands, the entirety of which was zoned CRZ 1—intertidal and ecologically sensitive areas [see Figure 6a on p. 152]. This designation placed the wetlands out of bounds for development. The plan’s one-line for Sheet 2 read: “The entire coast line consists of salt marsh (*sic*) and hence has been classified as CRZ 1” (Department of Town and Country Planning, 1996, p. 51). The plan and maps received the Union government’s approval in September 1996 (Ministry of Environment & Forests, 1996a).

A month later, the state government-owned State Industrial Promotion Corporation of Tamil Nadu wrote to the Government of Tamil Nadu (GoTN) seeking sanction to acquire 7,155 acres of ‘lands’ for a petrochemical project in Ennore (Government of Tamil Nadu, 1997). These included 4302.68 acres of *poromboke* spaces, including vast tracts of wetlands only recently protected as ecologically sensitive areas under the CRZ Notification.

⁵⁵ CRZ I covered intertidal stretches as well as other ecologically sensitive areas (dunes, mangroves, salt marsh). CRZ II denoted urbanised areas. CRZ III covered rural areas. CRZ IV covered coastal stretches in islands, other than those already zoned as CRZ I, II or III.

On 21 March 1997, a government order sanctioned the acquisition under the urgency clause of the colonial-era Land Acquisition Act, 1894 (Government of Tamil Nadu, 1997). This allowed the state to acquire lands for ‘public purposes’ without hearing objections from proprietors. Landless cultivators and *poromboke* users had no legal standing at all. The Act and the urgency clause sought to extinguish all rights and facilitate total erasure of the wetlands, their inhabitants and their users, but was confronted with a significant hurdle.

For acquisition to proceed, the wetness made visible in the form of a government-approved CZM plan had to vanish. Wetland had to first become ‘land’. A telling observation in the order reveals the deliberate nature of acts of seeing and unseeing:

It was brought to the notice of Government by TIDCO [Tamil Nadu Industrial Development Corporation] that the Director of Town and Country Planning who had been entrusted the job of delineation of Coastal Regulation Zone (CRZ) within Tamil Nadu had proposed certain areas in the area adjoining Ennore Port in a map incorporating the guidelines. For the said purpose of delineation, a Committee under the Department of Environment was appointed and the Committee was requested to submit its report/plan for the CRZ demarcation. The above report of the Committee has been sent to Secretary, Environment and Forest Department by Managing Director, TIDCO, to process so that the Coastal Regulation Zone (CRZ) *can be notified and implemented in a realistic and practical way.*

(Government of Tamil Nadu, 1997, pp. 3-4) (Emphasis added)

The order omits any reference to the already approved CZM plan that placed these wetlands out-of-bounds by virtue of its wetness, ecological sensitivity and the presence of salt pans⁵⁶ and salt marshes. Where the 1996 plan and map prepared under the CRZ Notification acknowledged and made visible the wetlands, the same law was intentionally repurposed to ignore. Erasure is not called for openly; it disguises unseeing

⁵⁶ Salt pans are identified as human-made wetlands under United Nations’ Ramsar Convention on Wetlands of International Importance especially as Waterfowl Habitat.

as seeing differently, “realistically,” “practically.” Such euphemisms lend an air of legality and rationality to technocratic ignorance.

The well-documented role of maps in colonial and imperial history reminds us that maps reduce reality to enable conquest. Layered meanings and lived spatial experience are flattened to present cartographic *fait accomplis*, inscribing certain things as “intelligible, surveyable and the proper objects of investigation and knowledge” while rendering others as “unintelligible, unsurveyable and epistemologically opaque” (Medina, 2011, p. 13).

In May 1997, GoTN approached the Government of India seeking to redo Sheet No. 2 to accommodate the petrochemical park. It proposed redrawing lines of tidal influence and excluding salt pans from CRZ coverage. Its request was accompanied by a new map—which activists dubbed the “fraud map” (Jayaraman et al., 2025, p. 275)—that relabelled the wetlands, including tidal backwaters, as ‘Petrochem Park TIDCO project.’ It excised 3 km from the southern extent of the sheet (Figure 6b]. Entire perennial tidal channels and backwaters were erased and presented as the only “realistic and practical way” to implement the CRZ. In Lefebvrian terms, the fraud map exemplifies how conceived space—an ignorance-based technocratic imaginary of planners—occludes lived wet space and spatial practices to produce erasure as a mode of rule, dessication and a precondition for capitalist order.

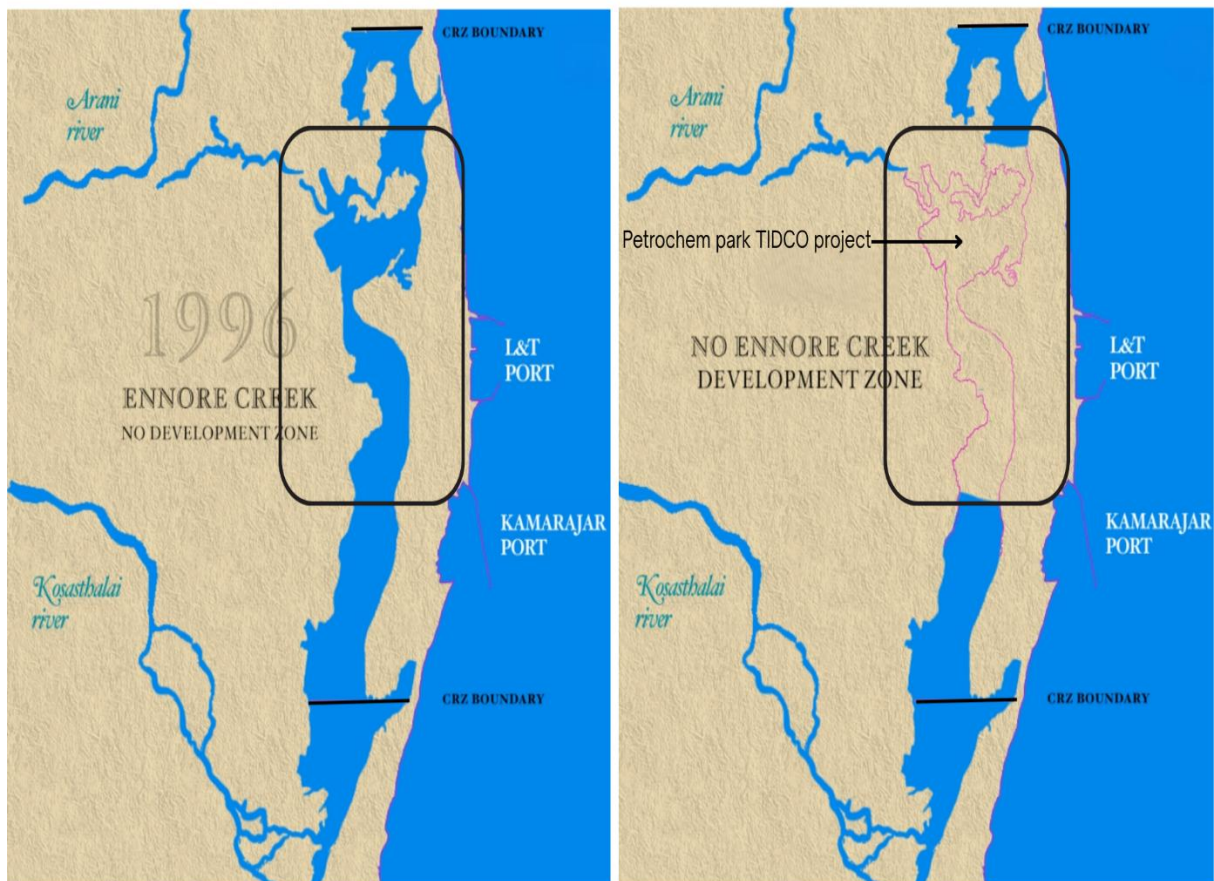
Another rule also stood in the way. In 1989, GoTN’s Environment and Forests department had banned polluting industries such as thermal power, chemical and petrochemical units within one kilometre of specified water sources, including the Kosasthalai river and Ennore wetlands (Government of Tamil Nadu, 1989). The fraud map ignored this setback requirement by obliterating a section of the river itself. The modified Sheet No. 2—the fraud map—was never approved; the exclusion of tidally-influenced salt pans was specifically denied by the Government of India (see p. 2 of media kit in Save Ennore Creek Campaign, 2017b).

Figure 6

CZM Plan—Approved and Fraud Maps

6a (Left): Approved Tamil Nadu CZM map, Sheet no. 2, 1996. Wetland intact.

6b (Right): Fraud map: Tamil Nadu CZM map, Sheet no. 2, 1997. Portion of wetland inside polygon excised



Note. Artistic rendition for illustrative purposes based on original maps obtained by Coastal Action Network and by Pooja Kumar, Save Ennore Creek Campaign, using the Right to Information Act, 2005, only. Artwork Copyright 2017 by Satwik Gade, Banao Creatives

Subsequently, both the fraud map and the approved 1996 map disappeared from public view, until activists retrieved it in 2017 through persistent research. That and a twist in this tale will be dealt with in the next chapter. In the interim, though, “nearly 3,000 acres of the Ennore wetlands had either been encroached upon or degraded by coal-fired power plants, coal stockyards, ash dykes, ports, a shipbuilding yard, and oil installations” (Jayaraman et al., 2025, p. 265).

In 2017, P. Mahendran, a fisherman from Kattukuppam, challenged the fraud map in court, highlighting its illegality and the devastation caused by industrialisation of the wetlands. He sought an interim order to halt further encroachments in violation of the 1996 approved map, and final ruling directing removal of existing illegal structures from the water body.

Three years later, the court concurred that the 1997 map had no legal status. But it neither granted interim relief nor critiqued the illegal encroachments. Instead, it observed that: “. . .there is no necessity for this Tribunal to go into the issue at this stage regarding the unsettling of certain things that has (*sic*) been done on the basis of the alleged 1997 Plan” (Mahendran P. & Ors v. Union of India, 2021, p. 42).

The court’s refusal to unsettle encroachments mirrors colonial powers’ ‘let bygones be bygones’ approach to treaty violations. It reflects a consensus of convenience and a shared commitment to ignorance among courts, planners, bureaucrats, and policy makers. Such consensus of convenience, as I propose here, is a tacit agreement among multiple elite actors to uphold a belief even if some or all suspect or know it to be false or contrary to agreement.

The fraud map case reveals how the present reality of water and tidal flows had to yield to an imagined future reality of a Petrochem park. To achieve this, the earlier approved map, its basis in satellite imagery from Anna University’s Institute of Remote Sensing, and the 1989 government order banning polluting industries were all ignored. This was not mere non-knowing but a consensual silence about what was already known. Such consensus thrives on plausible deniability, furnishing actors with the claim that their ignorance was innocent rather than deliberate—what McGoe (2021, p. 46) calls a tactic of ‘don’t ask, don’t tell’, justified in the name of public interest.

The decisions by multiple government departments and the court to ignore their own laws and protections cannot be dismissed as ordinary ignorance. This was a special form born of near-certain knowledge that status conferred impunity—in violation of a constitutional mandate of equality before law—and of a consensus of convenience between judge, jury and executioner. The former—impunitive ignorance—arises when higher status actors ignore lower status knowers and knowledges without

consequence. It is a hallmark of despotic and inequitable societies—including liberal democracies that profess equality while sustaining order built on inequality.

What emerges here is not merely the story of a fraudulent map or bureaucratic misconduct, but the anatomy of a system that clothes violence in procedure. The language of legality, the decorum of planning, and the ritual of adjudication together cloak dispossession in the appearance of due process. Power operates here not by suspending law but by performing it—through quiet alterations and secret approvals, through procedures that preclude objection, maps that erase while claiming to represent, and judgments that acknowledge wrongdoing but refuse to unsettle it. The shift from the 1996 to the 1997 map was effected discreetly, and the maps were removed from the public domain to prevent dissent. While legally questionable, each step was executed through bureaucratic procedure—written orders buttressed by unwritten instructions—that endowed illegality with the appearance of lawful process. Even scientific expertise, once marshalled to ground environmental protection, was cast aside when it ceased to serve power: the Institute of Remote Sensing's satellite-based demarcation was arbitrarily replaced by a politically convenient redraw. Such acts reveal that expertise itself is subordinate to the hierarchies of ignorance and authority that sustain impunity.

The Government's spatial vision—the TIDCO Petrochemical Park—was treated as a foregone conclusion, a goal around which a constellation of knowledges and ignorances, legalities and illegalities were assembled to make the project appear lawful. Compliance was pursued ritualistically when possible, and law was ignored or violated when necessary, all under the unspoken assurance that no one of consequence was likely to be held accountable. In the case of the judiciary, procedural compliance took the form of a ritual hearing—law performed without unsettling the illegal structures it examined. In the executive and bureaucratic realms, impunity manifested as non-compliance altogether, a knowing disregard for law's constraints. This conspiracy, sustained through consensuses of convenience among bureaucrats, political superiors, courts, and technical experts, exposes a mode of rule that depends on a shared confidence in impunity and in the irreversibility of even illegally or fraudulently cleared projects — a faith that the *fait accompli* will remain undisturbed.

This is a form of dispossession that thrives on civility itself—dispossession enacted through documents, maps, and malafide consensus rather than overt violence. Its authority rests on the confidence that procedural compliance equals justice, and that maintaining order outweighs restoring rights. In this sense, the fraud-map episode prefigures what I later describe as civil dispossession: a system in which legality and civility are not the antithesis of violence but its most enduring camouflage.

The fraud map episode revealed how ignorance is manufactured through bureaucratic procedure and sustained through malafide consensus. But erasure does not end with the redrawing of maps. It seeps into perception, memory, and the everyday workings of state–society relations, producing what might be called a ‘dangerous normal’—conditions of harm so routinised that they no longer appear exceptional. The next case turns to this slower, more insidious form of erasure. It traces how the degradation of Ennore’s wetlands was made tolerable through the marginalisation and misrecognition of those who lived by its waters.

6.5. Case 4: Invisible Worlds, Dangerous Normals

In the 1970s, the villages of Sivanpadaiveethi Kuppam, Mugatwara Kuppam and Kattukuppam complained to the fisheries department about the damage to their livelihoods from refinery effluents, and noise and turbidity pollution caused by dredgers clearing the river mouth. Rather than address the problem, the department offered compensation of Rs. 50 as relief per fisher (Government of Tamil Nadu, 1973a, 1973b, 1975).

The fisheries department—a powerless agency in the state’s bureaucratic hierarchy—was nonetheless the fishers’ main, if not only, interface with the state. Given their insular social positioning, fishers remained largely invisible, or worse, misrepresented. The depth of their ties to the river remained unfathomable to those in power. As hunters chasing mobile prey in moving water, fishers require skill, intelligence and mental agility. Yet, barring rare exceptions, government officials stereotyped them as simple-minded or unruly, attitudes ranging from patronising to outright hostile (Zonal Inspector General of Police, Tamil Nadu, personal communication, September 2012; R.L. Srinivasan, fisher, personal communication, November 22, 2023).

I asked Srinivasan a.k.a Srimi, a fisher leader in his 40s, about how officials viewed them and their concerns about the river. His home lies at the river bend before its last mile run to the Bay. The river at this point is a shape-shifting body of water-land. At high tide, the river appears normal, filled with seawater. At low tide, it reveals its altered reality: dark, oil-stained, sluggish. The city's metabolic signature appears as a fetid expanse of decomposed sewage and oily sludge. Srimi's reflections bear reproduction at length:

We have never been seen as people who are intelligent, as people who know something or as a good community. At the level of the administration, they have never seen us as that. "These are Kuppam (fisher hamlet) dwellers. They are what they are." There was that stigma in how they saw us. Even now, it is there, but less.

Oil from CPCL (refinery) would continuously leak into the river. All the time. It would stain our boats, our nets. If we complain that there is an oil spill, they will get two people armed with drums and gunny sacks, pay them wages. The oil would be flowing in thick slicks. They will soak the sacks and squeeze the oil into the drums. The oil would stain the river banks and our yards. *It became so routine for CPCL to do this that we did not know who to go tell it to. It became the normal.* We'd go to the Fisheries [Department]. They'd say they'll write a letter.

We know that the oil hurts the river, our livelihoods, that fish will be harmed. But for them, it is a non-issue. *"It's a government company. Oil is bound to come. It is natural for it to flow downstream. The tide brought this here." They normalised it. They do not see this as a river. They do not see its beauty or the many people labouring in the river, or the river as a living system.* To them, it is like a septic tank in which you empty effluents. We couldn't change their perspective. *They'd make it seem as though the pollution happened on its own and not because of lapses. "It overflowed. It leaked."* That's how they would describe it.

(R.L. Srinivasan, personal communication, November 22, 2023. Emphasis added)

Srimi's account captures how pollution was normalised. Continuous oil leaks and their spread through the wetlands were portrayed as natural, inevitable events—rather than

preventable, if not wilful, acts of negligence. They were made as though such events were only to be expected when an oil company operates near a river. This discursive move stripped pollution of its political and ethical dimensions, transforming an act of harm into an ordinary occurrence. At the same time, the fishers' situated knowledge and material suffering were dismissed through caste-marked ignorance: their embodied experiences of toxicity, labour, and loss were invalidated by an administrative gaze that viewed river, fisher and fishing pejoratively—the river as a sink for wastes, and fishing and fishers as dispensable. This normalisation of pollution is not a mere oversight but an epistemic violence that erases accountability while foreclosing recognition of the river as a living system and of fishers as knowing subjects.

6.5.1. Ennore Oil Spill and the Evils of Benevolent Ignorance

Exactly two weeks after my conversations with Srini about the normalisation of pollution, a disastrous oil spill carpeted the creek thick with toxic petroleum chemicals. I could not visit Ennore immediately —the city was flooded. That year's monsoons had been steady and heavy. The last downpour in early December had sent rainwater to seek out its old haunts. Low-lying areas derided as 'useless land' and filled in for development, including for the refinery, were overwhelmed, flushing industrial wastes with floodwaters into the backwaters, estuary and nearby homes. As the tide ebbed, the river pushed its toxic contents into the sea spreading a 20 square kilometre slick (Baraasu, 2023).

When I visited Ennore a week later, floodwaters had receded. But where the waters had invaded homes, they had left oil stains three feet high on the walls; a nauseating smell of petroleum waste hung heavily inside the ill-ventilated homes I visited. More than 6700 homes, 780 boats and 2,300 fisher families were reportedly affected (Shekhar, 2023).

This period after the rains is the most remunerative fishing season in the wetlands. But the spill had paralysed fishing. Desperate for any income, fishers pressed the government to employ them in the clean-up. Spill response is a highly specialised operation, requiring trained, protected personnel working as per a standard operating procedure. Despite decades of fisher complaints about oil pollution and a major 2017

spill, Tamil Nadu still had no standard operating procedure. Even in 2017, when two ships collided spreading a miles-long oil slick near the Ennore estuary, thousands of untrained volunteers were exposed to toxins in a botched oil spill clean-up (Sudharshini et al., 2017).

This time, the government placed a people-friendly and dynamic senior bureaucrat in charge. Yet, without standard operating procedures, trainers or trained crew, the bureaucrat had to improvise. Unprotected fishermen clad in T-shirts and shorts were employed for clean-up (See Figure 7), and manually scooped toxic oily wastes using bathroom mugs (DTNEXT Bureau, 2023). I raised concerns tagging the bureaucrat on “X,” urging protocol adherence, protective gear, and blood testing for exposed workers, following this up with direct appeals on Whatsapp and official complaints.

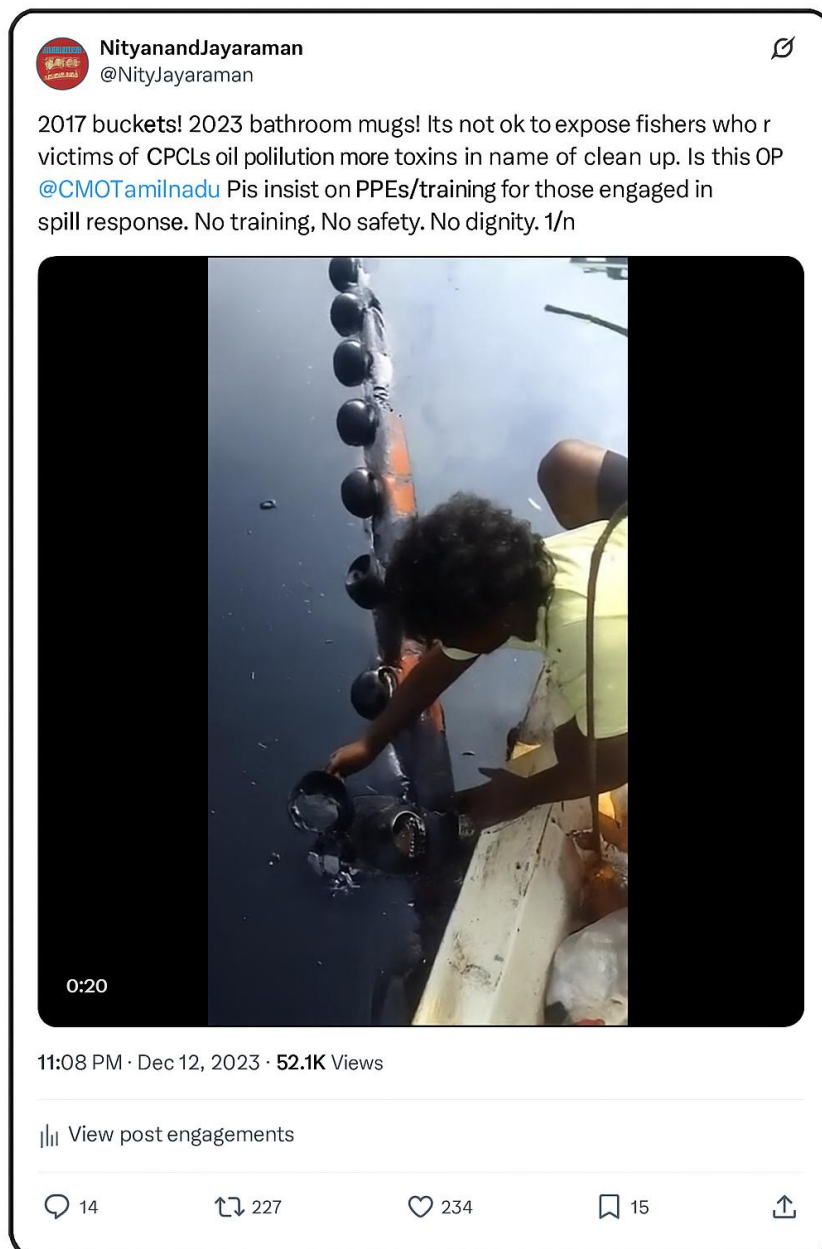
My repeated requests for training and testing went unanswered. At the fishers’ behest, I sought help from a leading occupational health researcher and head of research at a top medical university in the city to analyse blood and urine samples of exposed workers. Kattukuppam’s Fisher Cooperative Society was prepared to cover the costs. But our request for testing was denied. The researcher told me that such work would put the university in a tight spot with the government, and advised me to get the government or the industry to commission the analyses. The fishers needed to approach the very agencies responsible for poisoning them to learn what was in their bodies. They continued to work unprotected. In all, more than 440 workers, including teenagers, were exposed to toxins and hazardous work conditions over 10 days. By month’s end, the government declared the emergency over, announcing a grant of 7500 rupees (US\$ 87) for affected homes and 12,500 rupees (US\$ 145) per fisher family in livelihood relief (Chaitanya, 2023). Ennore returned to the deadly normal of its “chronic ecological crisis” (Ley, 2016, p. 108).

The spill response exposed administrative unpreparedness; equally, it revealed that the unpreparedness was not an innocent mistake but a consequence of deeper social ordering that renders both pollution and inequality routine. Beneath the visible chaos of the spill lay a quieter architecture of ignorance—potent in its veiled mode of operations. The absence of clear protocols, the deference of research institutions to political authority, and the unquestioned hierarchies separating fishers, bureaucrats, and

academics together produced yet another dangerous normal in which negligence passed as inevitability, rendering both pollution and inequality ordinary features of everyday life.

Figure 7

A young unprotected fisherman manually scoops oil as part of spill clean-up



Note. Tweet retrieved from author's twitter handle

The refusal to measure the levels of toxins in clean-up workers' bodies silenced an alternative history that might have provided evidence to disrupt the narrative of a

socially just Dravidian model. This ignorance—the refusal to know or let others learn—was potent because it foreclosed future challenges even as it operated quietly, subtly, politely. The bureaucrat ignored requests to have workers tested; the head of research just spread her hands, adding that she could do it only if approached by the bureaucrat or the polluter. This was not a simple case of non-action—of non-provision of protective gear or a failure to test—but an active refusal to do both. These were hidden acts that produced a powerful form of ignorance nipped any future possibility of a challenge to the uncivil, even illegal, nature of the clean-up. As McGoey (2021) observes, ignorance can be a strategic resource—a relation through which institutions preserve legitimacy, avoid accountability, and maintain the appearance of moral order. Strategies of ignorance, McGoey (2021) notes, are most powerful when their mechanisms are hidden, and here the concealment was achieved through civility itself. Without evidence in the form of laboratory results of toxic hydrocarbon metabolites in their bodies, exposed workers were effectively prevented from demanding treatment or compensation for harm arising from toxic exposure.

How does one understand a situation where such patently dangerous practices—like the manual handling of toxins—are accepted as ‘just the way things are’ by employer, regulator and worker alike? Social ordering through caste and status enables both oppressors and the oppressed to normalise differential treatment, making this business-as-usual ignorance hard to detect. It becomes part of a deadly normal that subsumes ignorer and ignored alike. The polluted waters of Ennore and the poisoned bodies of fishers were just the way things are.

Notably, there was no coercion. Left alone, the government would have hired others. It was the fishers who pressed for cleanup jobs, exposing themselves to toxins despite warnings. As one fisher said: “Government will not compensate us [for harm arising from oil spill and toxic exposure]. We are hungry now. Money is going to be spent on cleaning up anyway. Why should we not benefit? That’s what we’re thinking” (S. Kumaresan, personal communication, December 8, 2023).

Insisting on protective gear would have lost them this only income opportunity. As Kumaresan observed, exposure to toxins was an inescapable everyday affair for Ennore fishers:

Who will give me protective clothing after the oil is gone? Every day we wade through, dive into and spend six to eight hours in the river that is more sewage than water. All the sewers from the city drain into our river. We are bathed in that stuff. It gets into our eyes, nose, mouth. The river sediment is sewage sludge. We dive in and set our nets in that. This is the normal we'll return to after the visible oil is gone. (S. Kumaresan, personal communication, December 12, 2023).

For the fishers, this was not complicity or resignation, but justice grounded in experience. Their keen awareness of the government's indifference is evident in Kumaresan's definitive declaration that the government "will not compensate us." Such clarity comes from a lifetime of living at the margins, where promises are routinely broken and neglect is predictable. In the absence of meaningful compensation, protection, or recognition, lobbying for the clean-up work was a legitimate claim to distributive fairness—a demand to share in the limited benefits of a disaster that was only the latest episode in a continuum of everyday catastrophes that had already claimed their waters, health, and livelihoods. Their sense of justice was tempered by the pragmatics of survival and endurance, not in the abstractions of legal redress or moral outrage. As Kumaresan pointed out, cleaning the oil was no more hazardous than their daily labour in a river already saturated with sewage and effluent. If the river had long been toxic, then enduring its toxicity while earning a wage was simply what fairness looked like within the terms of their world. Seen from my vantage point, this may appear as a compromise; within theirs, it is a moral assertion — a form of justice that makes life possible in the dangerous normal they inhabit.

The government, meanwhile—shielded by ignorance and remoteness (Plumwood, 1999)—believed it had done a commendable job:

When I'm reflecting on this, there was so much criticism, outrage in media. So much negativity and questions asked. Between dealing with all that and running to courts, how we were able to stand with the people, to stand in the oily waters is because of people only. My belief is strengthened. If you have institutions where government and people are in partnership. When you travel with people in their boats, you stand with them in the oily waters, we were able to do it together. . . If we had worked by ourselves, it would have been different. The

entire clean-up was done by local fishers. (Government official, personal communication, January 8, 2025).

Ignorance does not have to be malicious; in some situations, benevolent ignorance can sustain an oppressive social order more effectively than malevolent ignorance. The official's reflections illustrate the moral comfort of restoring order. Empathy was evident in both words and actions, yet it revealed the tensions of working within institutional limits. Could standing in the oily waters have allowed the official to reconcile the unbearable dissonance between knowing harm was occurring and having to proceed anyway? The presence of the official among the fishers signalled solidarity, but it also embodied the contradictions of duty—to care, to deliver results, to restore order. Within such an order, goodwill and empathy can exist, but only in forms that do not threaten the system's functioning; they are permitted, even celebrated, so long as they help normalise rather than challenge danger. The institution itself remains cold and unfeeling, turning even the bureaucrat's compassion to serve compliance and for that care to focus on repairing appearances rather than redressing injustice. Curiously, both the official and the fishers were making the best of a bad situation, each seeking to salvage dignity and purpose within impossible constraints. In this sense, the clean-up became a vivid expression of life in the dangerous normal: a moral and material order sustained not by denial or coercion, but by people trying to do the right thing in a wrong world.

6.6. Case 5: Blind Faith and the Power of Promise

Until the 1990s, Ennore fishers expressed their grievances through sporadic demonstrations or letters. After the canal blockade of the 1980s, the next major collective protest occurred in 1997, two years after the commissioning of the first units of North Chennai Thermal Power Station (NCTPS)⁵⁷ two years earlier. At issue for the fishers was the plant's discharge of hot wastewater. Thermal plants boil water to produce steam which drives turbines connected to electricity generators. The spent

⁵⁷ North Chennai Thermal Power Station (NCTPS) was earlier called North Madras Thermal Power Station. To avoid confusion, I refer to the power plant only as NCTPS.

steam is water-cooled, and the spent hot water released into nearby water bodies after treatment.

Fishers complained that NCTPS' fast-flowing discharge eroded the riverbanks, scalded their bodies, and killed fish. After repeated representations and minor protests were ignored, nearly 150 people gathered and blocked the Buckingham Canal to stop hot water from spreading through the backwaters. Police violently dispersed the protest and jailed many, according to Yashoda Amma, a prominent woman elder from Kattupalli Kuppam. Women, led by Yashoda, agitated for days to secure bail (Yashoda Amma, 2023).

The hot-water problem was foreseen more than a decade earlier. In 1986, as the state prepared to acquire land for NCTPS, V.G.P. Housing Private Limited, a politically connected land-owner whose lands fell within the project area, objected noting that:

The proposed erection of Thermal Plant will be detrimental to the entire people of the North Madras. . . The hot polluted effluents pose threat to the Marine life. Moreover, the disposal of the thousand tonnes of fly-ash including some toxic metals in the neighbourhood of Pulicat lake may cause damage to the fishing and salt industries which sustain thousands of families of the weaker sections. (Government of Tamil Nadu, 1987)

In an affidavit to the Madras High Court, GoTN denied the risks. The court was assured that "The Electricity Board is fully conscious of its responsibilities." On hot water pollution, it claimed:

[It is] not hot polluted water that is proposed to be let into the sea. It is only the coolant water that is proposed to be let into the sea. The difference between the maximum temperature of the coolant water and the normal temperature of sea water will only be 5 degree C and this will not have any perceptible effect. (Government of Tamil Nadu, 1987)

Here, the court is invited to take several things at face value—and it does just that—because of who is saying it (the Government), the language that is used (technical) and the reasoning (presumed scientific). In effect, the court is asked to rely on a promise

and to repose faith in expert authority. Whether that promise was political play or misplaced faith will only be revealed later. If the promise was false—never intended to be kept—or the faith blind, never intended to be tested, then we can begin to see the contours of a new form of ignorance emerging: one that works by turning a bare promise into environmental protection.

NCTPS was commissioned in October 1994 and began discharging hot water through a once-through cooling system. Such systems circulate water through condensers that absorb process heat and release warmer water into a receiving water body without recirculation. They are viable and can achieve acceptable discharge temperatures only when vast volumes of water are circulated and the discharges are absorbed into large waterbodies like open oceans. They are ill-suited to shallow, semi-contained creeks like the Ennore estuary (M. Chernaik, staff scientist, Environmental Law Alliance Worldwide-US, personal communication, February 27, 2025).

In Ennore's context, the technology chosen was never capable of reducing coolant-water temperature to the levels promised to the High Court. Yet the promise had already done its work: it disguised projected compliance as evidence of compliance, using promissory politics to collapse the distinction between the two. The court's reasoning rested on faith that regulators would ensure the promise of no harm—defined as a temperature differential of less than five degrees Celsius—was kept. That, in turn, rested on other deeper faiths: that law itself was to be complied with, and the figure of five degrees Celsius was protective of the estuarine environment. As the previous sections demonstrated, and this section will show, these faiths—in expert authority, in the promise of compliance, in regulatory action, and in the rule of law—have been repeatedly exposed as misplaced. Yet each instance is treated as if it were the first: the recurring pattern of false promises, failed enforcement, and judicial reluctance to unsettle the status quo—starkly evident in the fraud map case—has never translated into knowledge for protection. Instead, this promissory politics, relying on blind faith in false promises, props a façade of civility, legality, and due process to conceal its true design: to dispossess in aid of accumulation.

By 1995, opposition to coolant water intake and hot-water discharge was already mounting. The 1995 EIA for NCTPS Stage II admits this:

Present environmental regulations stipulate that the temperature of hot water should not be more than 5°C than the intake water temperature. It is *not technically economically viable to design once-through type C.W. system* with a temperature rise of 5 degree C. Drawal of large quantum of water from Ennore backwaters would also pose serious problems due to the heavy littoral drift and closing of Courtaliyar river mouth. Further *fishermen who make a living in the backwaters are against the large withdrawals from creek. Hence, recirculating type C.W. system with cooling towers* using sea water as make-up has been envisaged. (National Thermal Power Corporation, 1995, Section 2.4.1. Emphasis added)

If this EIA's assertion was true, then GoTN's earlier assurance to the court about mitigating thermal pollution was insincere. The EIA itself acknowledged the impossibility of meeting the 5 degrees Celsius standard with a once-through system. The new stage promised cooling towers instead. This promise was built into the Environmental Clearance, which mandated a "closed cycle circulating water system with cooling towers" (Ministry of Environment & Forests, 1996b). However, the cooling towers too were never built. Today, nearly three decades later, and after numerous regulatory inspections and submissions by the power plant operators of compliance reports, 1830 MW—nearly triple the original capacity—continues to discharge hot water directly into the creek, unchecked. Once again, a promissory politics involving an elaborate charade of faith, science, expertise, due diligence and procedure is mobilised to dispossess, ignoring evidence exposing the politics as hollow. While inspection and compliance reports were treated as legitimate evidence to justify continued expansion of electricity generation capacity in the face of patent illegalities, the embodied experiences of fishers were epistemically devalued and rendered incapable of contesting the legitimacy of promissory politics.

Kattukuppam fisherman Kumaresan recalls his encounters with hot water:

The force of the release and the currents eroded the soil in and altered the profile of the river, to a point that boats that sailed alongside the ridges were grounded. If we stood knee-deep in the water, *we couldn't bear the heat of the water below the knee*. About 500 metres from where they discharged the hot water is a fishing ground called Noor Adi Paadu. Even as we approach that Paadu, *we'd start sweating profusely*. That was when the river started getting destroyed. Because of the hot water, first, fish and shrimp died. Second, due to the soil erosion, the river was blocked, so there was no way to go about our work. Third, when we did go fishing, *we would quickly get tired because of the heat*.

(personal communication, February 22, 2024. Emphasis added)

Kumaresan spends up to eight hours on a good fishing day in the river—experiencing its flows, sensing its sediments with his feet, feeling the water's embrace as he dives in to set his net. He finds the water too hot, hostile for both fishers and fish. His testimony is not anecdote but an insurrection of a subjugated embodied knowledge. His science was embedded in place and embodied in practice.

But fishers' complaints carried little weight because of their caste and status. Their science, their methods, and their instruments — their bodies — were considered primitive and non-viable alternatives to 'expert' science. In the technocratic imaginary, the fisherman's scalded skin and dying catch were not admissible as evidence, only as anecdote. The EIA's assurances and the bureaucrat's affidavit were presented as authoritative knowledge. In reality, though, they served as necessary ingredients for the production of authorised ignorance. They provided the first two raw materials, that were then embedded in the project's license, where the assurances acquired legal status as statutory conditions to be complied with by the proponent and enforced by the regulator. When the assurance is false from the outset—as in the first instance, where the technology and the promise were mismatched, or never intended to be honoured, as in this case, then the machinery of expertise and procedural compliance converts falsehood into fact. At that point, the weight of technical documentation and institutional authority is mobilised to produce a potent form of ignorance—one resting on blind faith and sustained by promissory politics.

Thirty years later, little has changed. The discharge continues, impoverishing the river and fishers alike. Neither has anything improved in the government or court's attitude. The response of a former chairperson of the Electricity Board, when asked about hot-water's impacts, is revealing:

I am basically an engineer, that too an electrical engineer. So I understand all these things. . . During that time, [fishers] were protesting the discharge of cooling water into the sea. I don't know if you've seen a cooling water system. It's about 2000 cusecs of water let into the sea. . . it's taken from the sea, little bit heated up. . . and let into the sea. To my common sense, this should not cause a problem to them. . . They were saying "Fish are all dying" etc etc. So we were maintaining the temperature as per the norms of the Pollution Control Board. I myself went and checked it. I also used to think a little bit of warmth (chuckling) for the fish is not going to. . . it's like common sense in my mind (chuckling softly). I'd be happy to have a shower in lukewarm water. What's the problem? [Fish will] go into the sea if it is not comfortable. So I thought they were making too much of a noise. You see, incidentally, I have got experience with fishermen also. I was director (corrects himself) Commissioner of Fisheries for about 7-8 months. Therefore, uh, I know how every group little bit exaggerates its problem. They do it with different motivations. It's not so simple.

(personal communication, December 19, 2023)

For this engineer-bureaucrat, fisher protests were little more than noise. What passed off as his knowledge—technical, instrumental, and detached from lived experience—was made possible by ignorance, whether wilful, negligent or structural, of the fact that the power plant had never installed the technology it promised to ensure a legally compliant discharge. Here ignorance was wielded as expert knowledge, his training as an electrical engineer was invoked to shield it, and fishers' motivations are painted as questionable to bolster a technically untenable claim of legal compliance.

When I asked the United States-based environmental scientist about the wisdom of a universal 5 degrees Celsius as the standard for all water bodies—tropical or temperate; contained or open—he replied:

It is my understanding that this is a *technology-based* standard: that is, it reflects the maximum temperature increase that a power plant would cause if it were employing good practices. It is *not a water quality-based* standard. That is, the standard for Condenser Cooling waters (once-through cooling system) of not more than 5°C higher than the intake water temperature is *not based on the protection of aquatic life*, and would not prevent harm to aquatic life that cannot tolerate even smaller increases in water temperatures. (M. Chernaik, personal communication, February 27, 2025. Emphasis added)

The EIA's promise of cooling towers was false; the technology was never implemented. Its assurance that a 5 degrees Celsius differential posed no significant risk was bad science. Yet the plant was commissioned and continues to hurt fishers and kill fish. Fishers complain; regulators ignore—once again exposing the interplay of impunitive ignorance and promissory politics that sustains 'civil' dispossession under the guise of expertise, science and rule of law. The state's word, a thermometer, the assurance of an engineer, and the judgement of a bureaucrat count as knowledge; the fisher's body, senses and testimony do not. This case thus illuminates how promissory politics functions as a stabilising device in large techno-scientific projects. By continuously shifting accountability into the future, it preserves investment, credibility, and regulatory legitimacy in the present.

When activists and fishers expose these ironies and reveal the litany of false and broken promises, they are told to approach the courts and 'have faith in the judiciary'. Blind to their own remoteness from fisher lifeworlds, judges often unquestioningly accept the word of scientists as science, failing to see the caste and status politics that underpin what constitutes acceptable knowledge. This ironic invocation to trust the judiciary and liberal law to deliver justice, and to repose faith in the scientific promises of the EIA, is itself a potent form of ignorance-for-governance—a promissory politics that aids 'civil' dispossession.

6.7. Conclusion: Quick and Slow Erasure

Across the five cases in this chapter, erasure comes across not as an event but as a repertoire of spatial, discursive and epistemic practices through which the state and its institutions sustain domination. Each episode—colonial salt industrialisation, post-independence fossil developmentalism, benevolent ignorance during disaster response, the bureaucratic “planning” of non-existence, and the faith invested in promissory technologies—shows that ignorance should not be seen as the opposite of knowledge but as its political twin. Where knowledge is paraded and celebrated, ignorance does its work quietly, sometimes hidden even from the ignorant actors that wield it to do good, or maintain and restore order. It is manufactured, circulated and sustained to stabilise state authority, legitimise dispossession and naturalise injustice. In this sense, the history of industrialisation in Ennore is the political economy of ignorance at work: of what must not be known, of what can be denied, of what economic visions should prevail and which should succumb, and of who may speak, be heard or listened to.

The analysis revealed two temporalities of erasure. Quick erasure occurs through sudden acts of violence or decisive interventions—legal amendments, executive orders, natural disasters and industrial accidents—that instantly reconfigure the material and moral landscape. Slow erasure, by contrast, unfolds through routine bureaucratic procedures, deferred compliance, blind faith in promises and the everyday work of seeing selectively and not-seeing. The former is spectacular and visible; the latter is banal, procedural and therefore more enduring. Together they configure a political ecology of erasures in which state power is exercised through the “management of memory” (Mills, 2007, p. 28) and invisibility rather than through dramatic acts of dispossession. In Ennore’s specific case, its littorality was both a source of frustration to those who saw it as a frontier—because of its refusal to conform to wet-dry, land-water, fixed-fluid binaries—and a target of erasure through ignorance. This political ecology of erasure was a littoral political ecology where the littoral’s nature, its varied meanings to diverse littoral beings, and the relationalities it supports become a site of contestation.

Each form of erasure also discloses a corresponding mode of survival. Fishers confronted quick erasures—the blocking of tidal canals, filling of backwaters, the loss of access to waterways, the episodic contamination of fishing grounds—by staying put, continuing to fish, and quietly reclaiming the waters that were being taken from them. Their quiet everyday trespass into spaces declared off-limits asserted the endurance of their world as commons without open confrontation. Against slow erasures—the secret rewriting of maps, the silencing of complaints, the dilution of regulations, and the everyday pollution that became the new normal—they mobilised memories, stories and embodied knowledge to re-inscribe what was being forgotten. Survival itself thus became a political act, a militant endurance that insisted on presence and practices of living in spaces the state sought to render absent. Survival, then, was not the prelude to resistance but resistance by other means.

A Lefebvrian reading clarifies how these dynamics unfold through contradictions between the representations of space produced by the state and the spatial practices of those who inhabit it (Lefebvre, 1991). Official representations—maps, master plans, project reports—depicted Ennore as wasteland, industrial estate, or flood-mitigation basin. Yet the spatial practices of fishers—their fishing routes, their continued use of the *paadu* (fishing grounds), their foraging for fruit as they rested after setting the nets, and their quiet trespass breaching official enclosures—produced a lived space that defied bureaucratic abstraction. The state’s spatial practices, far from realising their representations, often contradicted them: plans for containment produced flooding; technologies of control generated disorder; laws written to protect wetlands were repurposed to legitimise their degradation. These contradictions were not anomalies but structural features of a state that governs through selective blindness.

Four modalities of ignorance traced through the cases—impunitive, benevolent, consensual, and promissory—demonstrate how erasure is sustained across historical periods. Impunitive ignorance absolved institutions and individuals of responsibility for ignoring laws and protective norms and normalising harm arising from such ignorance as accident or necessity. Benevolent ignorance cloaked domination—and at an individual level, helplessness—in compassion, allowing officials to act with empathy without challenging systemic violence. Consensuses of convenience aligned state,

corporate and civil-society actors in mutually useful silences, and—in the curious case of oil spill clean-up—the bureaucrat and the fishers in ignoring the toxic effects of exposure. Promissory politics displaced accountability into the future, turning non-performance into an object of faith. Together, these modalities reveal the epistemic architecture of domination — a system that rewards not-knowing, ignoring and not allowing others to know when knowing would inconvenience power.

However, the same field of ignorance incubated alternative epistemologies. The fishers' counter-knowledge—rooted in bodily experience, collective memory and moral reasoning—persisted as a subterranean current that repeatedly broke the surface. Their testimonies about dying fish, their tracing of forgotten canals and land-filled *Jenjeris* and quiet trespass into 'government-owned' wetlands, and their refusal to accept technical explanations that denied lived evidence all constituted acts of “epistemic disobedience” (Mignolo, 2009, p. 159). These moments demonstrate that knowledge and ignorance are not binary opposites but co-constituted forces within the same epistemic terrain. Knowledge sustains its authority by denying its own limits, by pretending that nothing escapes its grasp. Yet, as the fishers' practices reveal, the binary occludes the shades of the spectrum—the fluid, interstitial ways of knowing that thrive in the spaces between certainty and doubt.

The patterns traced across these cases reveal how the very instruments—laws, plans, regulations and adjudications; the institutions that claim to uphold justice—bureaucracies, courts, regulatory agencies, and the public sphere; and their practices—hearings, consultations, expert appraisals and inspections—become vehicles of dispossession. Blind faith in procedural rectitude, the promissory politics of reform or compliance, and the cultivated ignorance of historical patterns of deceit, failed regulation, and timid adjudication together bring together a form of dispossession that is exemplary rather than exceptional. This dispossession is 'civil' because it proceeds through the rituals of civility: through the perversion of the rule of law at every step and is ultimately presented as the faithful enactment of legality itself. The scare quotes around civil signal this irony: that what is celebrated as lawful, rational, and socially progressive is, in practice, a mode of organised harm. 'Civil' dispossession thus names both a strategy for enclosure, proletarianisation, and frontier-making, and a mechanism

by which capital and the state externalise costs and harms onto the commons and commoners while preserving the moral sheen of legality.

Liberal law and civil society, presented as guarantors of justice, function here as instruments of erasure precisely because their procedural rationality demands that the world conform to categories legible to them. Fishers who did not own property, who moved across land and water, or who worshipped deities outside sanctioned religions simply fell within a liminal space in the moral cartography of citizenship. Their dispossession was therefore civil in form and uncivil in effect: it resembled colonial conquest more than democratic governance. It represents a sub-type of Harvey's (2017) "accumulation by dispossession," aimed specifically at erasing non-capitalist life-worlds.

Even within this terrain of 'civil' dispossession, however, other moral economies persisted. When the oil-soaked waters offered no safe work, the villagers ignored the risks of toxic exposure and struck a deal with the bureaucrat to undertake the clean-up themselves. Though dangerous, the labour provided income at a desperate time for more than 440 families from multiple villages. This was not an act of individual opportunism but a collective negotiation that distributed risk and benefit communally. Their bargain reflected a non-capitalistic, non-accumulative ethic of survival: to share danger so that everyone might live. In making a deal that privileged subsistence over accumulation, they revealed that other worlds rooted in care and cooperation need not be imagined elsewhere—they are already being lived. Such acts of moral improvisation complicate the narrative of victimhood, showing how endurance can re-energise solidarity even under conditions of structural violence.

By tracing how the fishers endured, we glimpse the latent transformative energies within survival itself. Their persistence nurtured a collective ethics of care and responsibility that quietly re-made social relations—within and between villages, and between humans and the wetland. What began as efforts to defend livelihood evolved into a politics of belonging that re-imagined the wetlands as living commons integral to both fisher and city survival. The acts of staying, remembering, repairing and narrating carried emancipatory weight: they contested not only the state's spatial order but also its moral order.

These gestures of endurance reveal that transformation is neither a rupture nor a future horizon to be achieved; it is an immanent, lived quality within practices of survival that already subvert the moral and epistemic order of the state. The fishers' collective 'clean-up', their distributive ethics, their refusal to disown polluted waters—all these are prefigurative ethics as habitus and praxis.

For the fishers, these acts were not staged as resistance or imagined as revolution; they were simply the continuance of life as they knew it. Yet it is precisely in these continuities that the possibility of emancipation resides. The analysis of erasure in this chapter therefore extends theory in three ways. First, it shifts attention from spectacular acts of dispossession to the mundane, procedural and epistemic operations that make them possible, thereby expanding the scope of political-ecological analysis of power. Second, by theorising ignorance as an active socio-spatial relation rather than a cognitive void, it bridges critical ignorance studies and Lefebvrian spatial theory. Third, it grounds these abstractions in the lived strategies of subaltern endurance: it showed that transformation begins not at moments of victory but in the obstinate refusal to disappear. These contributions invite a rethinking of sustainability transformation—not as a teleological or managerial transition, but as an agonistic process in which the very struggle to remain visible and audible becomes transformative.

The story of Ennore does not end with survival. Out of the ruins of erased worlds emerged new solidarities, vocabularies and tactics that re-scaled the struggle. By mobilising subjugated knowledges and memories, fishers and their allies began to subvert the ignorance that had long contained them. The next chapter follows this shift—from enduring erasure as resistance to resurrecting and recirculating ignored knowledges as orchestrated resistance.

Chapter 7

Resisting Erasure:

Solidarity, Struggle, and the Fight for Ennore's Wetlands

Erasure, as noted earlier, is seldom complete. It is both a product and a precondition of domination: while domination erases inconvenient histories and knowledges, erasure in turn—in the form of produced ignorance—clears space for further domination. Yet its very incompleteness leaves behind fragments of memory and traces of life before—detritus containing potent knowledges that, once resurrected, can disrupt and challenge power (Dillon, 2006).

The cases in Chapter 6 showed how 'civil' dispossession was enacted through the production of various kinds of ignorance—aided by fraud, blind faith and promissory politics—occluding fishers and their place-based knowledges. Their marginality, coupled with unfamiliarity with bureaucratic systems, institutional science, and law, enabled the state to wield this ignorance toolkit with relative ease. That chapter also traced the historical and ongoing discontent among fishers and their attempts to seek redress even as they endured the pains of erasure. It documented erasure unfolding in the face of contained, localised protests, often 'resolved' through offers of paltry compensation or insecure jobs or insincere assurances. Fishers too were neither assertive nor coordinated. As Kattukuppam fisher Srinivasan points out, "With government officials, we would go with our pleas and expect to be treated mercifully. I do not recall asserting our rights or speaking law to them" (personal communication, December 2, 2023). Neither the protests nor accounts of the worsening degradation of the wetlands travelled beyond the village.

Organised protests began in Ennore only "in the last 10 years," after the impacts on livelihoods and the absence of promised jobs became undeniable (V. Bagathsingh, personal communication, February 3, 2024; D. Selvarajan, March 6, 2024). Both participants stress that the entry of activists, and the solidarity they mobilised, transformed the struggle and gave fisher voices new reach.

This chapter analyses the data, including autoethnographic accounts of work in the Save Ennore Creek Campaign (SECC),⁵⁸ to demonstrate how fishers contested the erasures enacted by the state's production of ignorance. Drawing on Medina's (2011) Foucaultian Epistemology of Resistance framework (See Section 4.2, Chapter 4), I contrast the modalities of domination through the subjugation of subaltern knowledges with the insurrectionary mobilisation by the fishers of such subjugated knowledges and histories to examine how the fisher-activist campaign survived the produced absences and re-emerged.

I begin by outlining the campaign's strategic framework, highlighting the centrality of deep solidarity between activists and fishers. This draws on my campaign experiences through the Vettiver Collective and interviews with colleagues from the Collective and SECC, notably K. Saravanan (Personal interview, January 12, 2024) and Pooja Kumar (Personal interview, February 1, 2024). Next, I will present three case studies illustrating how the campaign elevated the visibility and status of the wetlands, worked to undo past erasures, resisted new encroachments, and charted a path to shape the future. Data for the case studies will include (auto)ethnographic content, interviews, campaign press releases, news media articles, official maps and documents, correspondence between SECC/fishers and government departments, and submissions and orders of courts that are part of SECC's database.

Case 1 shows how the campaign used the December 2015 Chennai floods as a focusing event (Birkland, 1998) to reorient, rescale (Ahmed, 2012), and empower the struggle, drawing in new solidarity and valorising the Ennore wetlands. It focuses on a campaign music video—Chennai *Poromboke* Paadal—and subsequent accountability actions to illustrate how detritus from incomplete erasures were mobilised to unleash counter-hegemonic discourses.

Case 2 picks up on the fraud map case discussed in Chapter 6. Focusing on the campaign's use of two laws, the Right to Information (RTI) Act, 2005, and the Coastal

⁵⁸ In the following sections, uncited references to the Collective or SECC's activities were drawn from my recollection of what happened during my participation as an activist. I flag these references with a footnote noting them as "Autoethnographic observations". Data from field observations and fieldwork interviews during my return to the field as a researcher will be clearly cited as "Personal communication".

Regulation Zone (CRZ) Notification,⁵⁹ this section demonstrates how policy generated politics (Mettler & Mallory, 2018) and analyses the strategies and conditions that helped fishers prevail.

Case 3 profiles a women-led campaign to thwart plans to set up a mega-port in the Ennore-Pulicat region. As a case of gendered commoning, the campaign turned culinary practices and festive gatherings into affective, embodied politics that reclaimed space, built solidarity, and articulated an alternative vision of development rooted in care, livelihood, and everyday reproduction rather than extractive growth.

7.1. When Rivers meet: The Power of Solidarity

K. Saravanan, a fisher activist and long-time Vettiver Collective member, is both a self-trained GIS counter-mapper—or maptivist (Drozdz, 2020)—and an expert in using the RTI Act and the CRZ Notification to defend coastal communities. He had honed his skills during a campaign in 2010-2011 to protect the livelihood commons of 14 fishing villages, including his own, from being taken over by an elevated beach expressway (Kumar et al., 2014).

In 2013, an RTI request tracing illegally mined sand from a river near our homes in south Chennai led Saravanan to Ennore. He discovered that the sand was being used to land-fill salt pans to build the NTPC Vallur Power Station. While there, he also witnessed KPL dumping dredged sand into tidal wetlands to create land for port infrastructure and office buildings (K. Saravanan, personal communication, January 12, 2024). Drawing on skills learnt during the Save Chennai Beaches (SCB) Campaign against the beach expressway, he translated official maps and reports, mobilised fishers and non-fishers, and learnt to counter state projects by combining fisher testimony with legal and technical specifics. He recalls:

it is only through this campaign that I learnt the importance of presenting issues in a manner that draws in different audiences. If we had restricted ourselves to

⁵⁹ The original CRZ Notification, 1991, was superceded by a notification in 2011, which was superceded by a new notification in 2019. Unless specified by year, my use of CRZ Notification or CRZ rules or law refers to the general intent of the law – namely to regulate development along India’s coastline.

fighting this issue as a fisher issue alone, I don't think we would have succeeded in defeating the project. Broadening the struggle to include non-fishers was crucial. (K. Saravanan, personal communication. January 12, 2024)

Turning to Ennore, Saravanan obtained KPL's project maps and documents, and used his mapping skills to confirm their illegality, and presented them to the three most-affected fishing hamlets—Kattukuppam, Mugatwarakuppam and Sivanpadaiveethi. Fishers knew the consequences of encroachment, and had even complained, in vain, to the government about it; but, they said, they had not encountered the CRZ law protecting their rights. Saravanan recalls that their "complaints were of a very general nature." His experience from the beach expressway campaign had taught him that "we had to provide specifics, include maps and point out specific violations" (K. Saravanan, personal communication, January 12, 2024).

With Saravanan's help, the Ennore villages re-drafted their complaints drawing on their knowledge of the river but also anchored in law, maps and specifics. They annexed relevant maps, including with the new encroachments overlaid on official maps to reveal illegality. The district CRZ agency responded with a stop-work notice. The fishers discovered their new agency. They realised that basic legal education and legally-informed complaints could be effective tools to counter the government's ignorance (K. Saravanan, personal communication, January 12, 2024).

The villages then sought the Collective's help in filing a court case. We counselled against immediate litigation. From experience, we knew courts were hostile terrain for marginalised communities facing government adversaries. Judges, often of similar class-caste backgrounds as officials, tended to side with the state (Advocate, personal communication, January 18, 2025). By contrast, the street, the media, and public fora provided more accessible arenas for shifting power.⁶⁰ We knew that invisibility offers cover for polluters and encroachers to operate with impunity, and heightens the vulnerability of the wetlands and the fishers in this case. Making the wetlands visible beyond the villages was thus a strategic necessity.

⁶⁰ I refer to such tactics as layfare and describe it in greater detail in Chapter 8.

Between 2013 and 2015, Saravanan, Pooja and I visited Ennore repeatedly. Our goals were twofold: (a) to learn from fishers how they understood the wetlands, and (b) to train young leaders in legal literacy and advocacy. These exchanges created a dialogic process of translation—fishers articulating their experiences in legal terms, and us rendering scientific or legal texts into local registers. Later, this extended outward—fisher knowledges were translated for the public, scientists, officials and judges. As described in Chapter 5, I frame this as deep solidarity—relational, reciprocal, and built on humility, slowness, mutual assessment of needs and strengths, and a bed of trust nurtured through small actions and small outcomes of surviving failures and celebrating successes. Through shared journeys on the river and backwaters, we unlearnt our own assumptions and learnt to see with fisher eyes. We learnt that the lands that to our eyes appeared as dry and unimpressive looking, and therefore unimportant margins to the perennial channel were neither land nor unimportant. Rather they were once-productive wetlands now choked with coal ash. In the fisherworld, the margins are where the diversity and productivity lay. The mainstream, we were told, was merely the beneficiary (S. Kumaresan, personal communication, February 14, 2025).

We learnt of tidal flows, the life-sustaining quality of the sediment (*seru*), and the names of canals, including those erased by industrial infrastructure (Jayaraman & Kumar, 2017). On our boat trips with the fishers, we saw how certain sections of the river were so thick with ash that boats had to be portaged across. Everywhere one looked across the wetland-scape, the infrastructures of urbanisation were visible—a mesh of transmission towers, roads and conveyor corridors for water, coal and ash criss-crossing, gridding and enclosing the commons. Through a dialogic process that spanned several years, we—the fishers and members of the Collective—developed a baseline geographical knowledge of the fishers’ territory.

Training sessions for literate fishers introduced key legal tools—the CRZ and EIA Notification—produced evidence-laden letters and RTI requests, and familiarised them with environmental due diligence and legal advocacy. Through interactive programmes of critical knowledge co-production (Temper, Walter, et al., 2018), everyday fisher experiences were reworked into evidence legible to multiple audiences as noted above.

The results were visible. Fisher protests against industrial encroachments into the wetlands were now preceded by checks on licensing status and compliance; protest leaders prepared themselves to argue points of law with police and officials. As one fisher leader reflected:

Not only did our narrative change, but the government too was forced to respond to that narrative. That change came about through our knowledge of the law.

When we came to know that there was a law to protect us [CRZ] that was a big tool to not only protect ourselves but also to protect nature's creation, and our perspective broadened.

(R. L. Srinivasan, personal communication, February 22, 2024)

The new legal literacy helped de-escalate protest confrontations and produced a growing paper trail of state violations. This archive enabled fishers to pressure the executive directly and, when necessary, turn to the courts. As the cases that follow show, this combination of public and legal tactics allowed the fisher-activist campaign to reshape discourse and secure significant victories.

These transformations were more than just tactical improvements in protest strategy; they marked a deeper epistemic rupture. By translating their lived, embodied knowledge of rivers and wetlands into evidence that could speak in the registers of law, policy, and science, fishers unsettled the consensuses of convenience that had long enabled officials and offenders to ignore violations with impunity. What had once been dismissed as parochial complaints now entered the domain of law and public reason, compelling the state to respond on terrain it had previously controlled. Viewed through the lens of an epistemology of resistance, fishers had turned the very instruments of erasure into tools of revelation, frustrating the production of impunitive ignorance and reclaiming status as knowers of their world. By doing this, they recovered silenced knowledges, and reconfigured the struggle.

7.2. Case 1: A Flood—of Resistance

The 2015 northeast monsoon brought steady, heavy rains. By the end of November, all waterbodies were near capacity and the land was soaked. On 1 December, the day

began with torrential downpours. The city was drowned by day's end. As he departed for the 21st climate summit in Paris, Indian environment minister Prakash Javadekar framed the floods as a manifestation of climate change and blamed industrialised nations (Pathak, 2015).

In Ennore, a different narrative emerged that pointed to land-use changes, not climate change, as the cause of floods. Fishers pointed out that encroachments into the river had retarded drainage of floodwaters (R.L. Srinivasan, personal communication, February 22, 2024). During the floods, Ennore's fishers launched 120 boats and rescued more than 30,000 people from locations that had never flooded before (Jayaraman, 2016a).

Even as the waters receded, KPL resumed dumping dredged sea-sand into wetlands, smothering mangroves for port expansion. This time, fishers, armed with RTI documents showing the work was unlicensed, physically blocked the encroachment (Yamunan, 2015). Earlier protests had ended with police threatening fishers with arrest; but faced with evidence of illegality, police were compelled to instruct KPL to produce a valid license or halt operations.

Within days, a fisher petitioned the National Green Tribunal (NGT), opening a crucial channel for articulating fisher sentiments and grievances in a legal forum (Ravimaran R. (Died) & Ors v. Union of India, 2016)⁶¹. This case spotlighted KPL's encroachments and state-run electricity utility TANGEDCO's coal ash discharges into the wetlands. Even before the Tribunal's orders, fisher protest had forced the State Coastal Zone Management Authority to issue a stop-work notice. The Tribunal later ordered KPL to remove dredged sand and TANGEDCO to clear coal ash (see orders dated January 18, 2016, and March 16, 2016, in Ravimaran R. (Died) & Ors v. Union of India, 2016).

Later, in March 2016, a newly formed Collective of All Ennore Fisher Villages (*Ennore Anaithu Meenava Grama Koottamaippu*), assisted by city-based activists including myself, convened a citizens' public hearing before a panel led by Justice D. Hariparanthaman, a retired judge of the Madras High Court, and two social scientists;

⁶¹ The National Green Tribunal uses "(Died)" as a suffix instead of "(late)" as a prefix in its case title.

all three were known to be fair-minded public intellectuals sympathetic to fishers and familiar with subaltern struggles. Yet, we felt that their privileged social position would introduce a distance and remoteness (Plumwood, 1999) from the fishers which could distort their understanding of the latter's perspectives. To mitigate this remoteness, fishers took the panelists on a guided boat tour. As in earlier toxic tours,⁶² direct experience of the polluted wetlands and fisher testimony proved more compelling than written briefs. It also provided an opportunity for the panel to have unmediated access to fisher understanding of the wetlands. At the public hearing, fishers testified about pollution, encroachments and the heightened flood risk to the city. The panel's April 2016 report underscored the aggravated flood risk, recommended severe penalties on polluters, and called for a moratorium on industrial expansion (The Coastal Resource Centre, 2016a). The hearing and the report were widely covered by the media, liberating the issue from its hyperlocal confines (DC Correspondent, 2016; Hemalatha, 2016).

The rupture caused by the 2015 floods had opened an opportunity for fishers to expose the insincerity of the state's technoscientific promissory politics of regulation and safe industrialisation through laws like the Environment Protection Act, 1986, and EIA Notification, 2006. As Chapter 6 showed, these promises obscured systemic failures and Ennore's dismal local particularities, redirecting attention to lofty imperatives of nation-building and electricity generation.

For long, the state's ignorance tactics had succeeded in silencing fisher narratives and hiding incriminating evidence in plain sight. The floods broke this silence. As a focusing event (Birkland, 1998), they created conditions for previously marginalised knowledge to gain discursive traction. Whereas the government framed the floods as unpredictable or natural, fishers and activists underscored their predictability, declaring that in Chennai, if it rains, it will flood. They used the predictability to focus attention on and "champion messages that had been effectively suppressed by dominant groups"

⁶² Toxic Tours were conceived by environmental justice activists in North America as community-guided visits to sites of pollution and environmental harm. They were first introduced in Tamil Nadu by members of the Vettiver Collective in 2003 to highlight the experiences of a pollution-impacted community in Cuddalore. In Ennore, the first toxic tour was conducted sometime around 2010.

(Birkland, 1998, p. 54), and fed an emerging narrative that Chennai floods were a human-made disaster resulting from abuse of the city's wetlands.

As I discuss in the following section, they even prolonged the usually short-lived policy window (Kingdon, 2014) opened by the event by redefining and rescaling issues and mobilising the power of evocative symbols (Birkland & DeYoung, 2012).

7.2.1. A Song for the *Poromboke*

In 2016, Vettiver Collective launched SECC to mobilise solidarity to work alongside the fisher campaign. Drawing from its lessons from the elevated beach expressway campaign (discussed Section 7.1) and from Ennore fishers, the Collective foregrounded the alienation of the *Poromboke*—the commons—as a cross-cutting theme across conflicts between commons communities and property-centred development. Once a revenue category denoting lands protected for communal use, colonial governance—with its derogatory view of non-property spaces—had gradually degraded the word into a pejorative for wastelands and worthless people. As Chapter 6 showed, this framing persisted, justifying the erasure of wetlands and their users.

In September 2016 and January 2017, bookending the nervously anticipated northeast monsoon, Justice Rocks, the Collective's arts-activism platform, released two music videos that revived memories of the 2015 floods. Drawing on fishers' knowledge, the videos linked the floods to wetland abuse and called for the *Poromboke*'s valorisation. The second video, Chennai *Poromboke* Paadal⁶³ (CPP), featuring renowned activist musician T.M. Krishna, went viral with more than 430,000 views (Vettiver Collective, 2017). It spurred local, national and international debate (Allen, 2019; Outlook Web Bureau, 2017; Srinivasan & Turner, 2022).

CPP was radical in form and content, and suffused with visual and lyrical symbolism. Sung in "Carnatic"—a classical music genre long critiqued as Brahminical and exclusionary—it introduced colloquial Madras Tamil into a tradition reserved for sacred texts. By locating Ennore within both environmental and anti-caste politics, the song

⁶³ *Paadal* is Tamil for song.

breached cultural ramparts and reached audiences otherwise distant from fisher struggles with a message highlighting the discriminatory nature of development.

By subverting colonial-modern aesthetics to valorise subaltern worldviews and alternative artistic sensibilities, CPP exemplified what Mignolo and Vázquez (2013) call “decolonial aestheSis” (p. 5). In a reference to the decolonising tendencies of using a music video instead of policy briefs or scientific reports, “decolonial aestheSis” flags the deployment of metaphor, satire, lament and an insurgent aesthetic to re-enchant the *Poromboke* and elevate fisher epistemologies rooted in everyday life.

As one media outlet commented:

[CPP]. . .has many firsts to its name. It is the first time Carnatic is sung in colloquial Madras Tamil. It is the first Carnatic song to deal with a contemporary environmental [issue], and the first time the word “*Poromboke*”—a word associated with the impure, the margins and the worthless—has been celebrated as the central subject of a Carnatic song.

(Sabrang, 2017)

At its launch, Tamil novelist Perumal Murugan declared: “*Poromboke* is a public space, the property of the entire community. Not just in Ennore, in no place else should *Poromboke* spaces be encroached” (Justice Rocks Initiative, 2017). CPP thus repositioned Ennore’s wetlands as a symbol of marginalised spaces and people, while linking their plight to broader urban struggles (Nath, 2017).

Songwriter-singer Kaber Vasuki’s lyrics further scaled the struggle. One stanza tied Ennore to the city, another to other threatened places, and a third to global capitalism, linking the “militant particularism” (Williams, 1989a, cited in Harvey & Williams, 1995, p. 83) of Ennore’s place-based struggle with broader issues.

(Stanza 1)

The flood has come and gone, what have we learnt from that?

To construct buildings inside waterbodies, what wisdom is that? . . .

(Stanza 2)

Once he gets done with Ennore, he will come for your place too.

If you stop, challenge or dare to resist,

‘MAKE IN INDIA’ he will lie and insist. . .

(Stanza 3)

Growth, jobs, opportunities; these are just flimsy excuses

For one who sold the waterbodies, the lake is mere poromboke

(Vettiver Collective, 2017)

Figure 8

Chennai *Poromboke* Paadal—a song for the *poromboke*



Note. A screenshot from CPP depicting a dystopic ash-choked river. Vettiver Collective. (2017, January 15). *Chennai Poromboke Paadal* ft. T.M. Krishna [Video]. YouTube.

<https://www.youtube.com/watch?v=82jFyeV5AHM>

States engage in scalar politics of containment to make place-based struggles appear fragmented, parochial and inconsequential in the face of the state’s lofty scales of nation-building, planned urbanisation and world-class cities. These verses illustrate how the campaign disrupted the state’s scalar containment (Ahmed, 2012).

Instantiating another scale-shifting tactic, before the onset of the 2016 monsoons, Ennore fishers wrote an open letter addressed to “Dear Chennaiites” reframing the wetlands as critical regional flood mitigation infrastructure, and not merely a source of

local livelihood. The letter intended to forge new solidarities with city residents by demonstrating “commonalities between their political goals [protecting wetlands for livelihood] and other more persuasive political goals [regional flood protection]” (Jones, n.d., cited in Cox, 1998, p. 43):

We are writing as Chennaiites to Chennaiites to invite you to join us in saving the Ennore Creek. Even as you read this, uncaring people in the government and private sector are harming the river. As fisherfolk, we are the first in the line of fire; the degradation of the creek affects us daily. But this is no longer merely about us. The river holds the key to our shared environmental fate as a city.

(Jayaraman, 2016a)

This engagement with spatial politics was more than just a reaction to the state’s discriminatory spatial vision; it was an assertion of spatial rights. By repositioning wetlands as critical to Chennai’s survival, fishers appropriated the power to define space and wielded scale as strategy (Ahmed, 2012). This was an insurrectionary discourse (Medina, 2011) that unsettled state narratives of inclusive growth and revealed ignored knowledges of the long-standing abuse and derogation of wetland commons.

This re-scaling was crucial for fishers seeking to transcend their marginality as the CPP enabled the creation of a subaltern counter-public (Fraser, 2014). Social media circumvented the exclusionary Habermasian public sphere—where they lacked status and engagement skills—giving fishers and allies a “parallel discursive arena” (Fraser, 2014, p. 84). Ironically, the song’s viral success breached the mainstream public sphere itself, circulating marginalised narratives within it. Through the parallel arena, fishers connected with city residents highlighting their shared environmental vulnerability tied to the wetlands. Thus the counter-public sphere offered a space for marginalised views to be expressed with minimal mediation and distortion.⁶⁴ Aided by a humble solidarity,

⁶⁴ I say minimal distortion and mediation because CPP already represents a mediated subaltern view and narrative form, as it is a collaborative effort between fishers and people with access both to the public sphere and to decision-makers. The question of whether such mediated access—even if only ‘minimal’—to the public sphere causes a loss of subalternity is interesting. Chemmencheri’s (2015) findings resonate with my reading of the dynamics of mediation and subalternity in Ennore. In a study of interactions between global media and two subaltern struggles, Chemmencheri (2015) found that rather than rob

the post-flood moment allowed fishers to plant one foot in each sphere—counter-public and public—strengthening their ability to reshape discourse and societal values.

7.2.2. Mediating Emergence: Reframing Ennore in the Public

Sphere

A content analysis of print media artefacts from the periods before and after the floods supports Chemmencheri's observations. The supportive findings are based on a simple content analyses conducted for this research to answer the questions: Did the fisher-activist campaign create space for fisher voices to be heard? How did media coverage of Ennore change after the December 2015 floods? To answer these questions, all Google search results covering all news items mentioning the word "Ennore" between January 2012 and December 2017 were identified. A total of 97 results, including 37 during pre-flood period and 60 during post-flood years, were analysed.

The content analysis confirms a marked shift in narrative space during the two-year post-flood period as compared to the four years before the floods. During the four-year pre-flood period, only 3 of 37 news items mentioning Ennore addressed environmental issues; none focused on the wetlands. Two of these quoted fisher voices. By contrast, in the two years following the floods (December 2015 to December 2017), there were 47 environmental stories out of a total of 60 articles. Many centred on the wetlands and pollution events such as the 2017 oil spill (See Figure 9).

Twenty-one of these quoted fishers (five exclusively), while the remainder included solidarity actors from groups such as the SECC (See Figure 10). This quantitative change underscores how solidarity-based interventions helped amplify fisher perspectives, shift coverage away from business and crime framings, and create openings in both counter-public and mainstream public spheres for subaltern narratives to be heard (Chemmencheri, 2015).

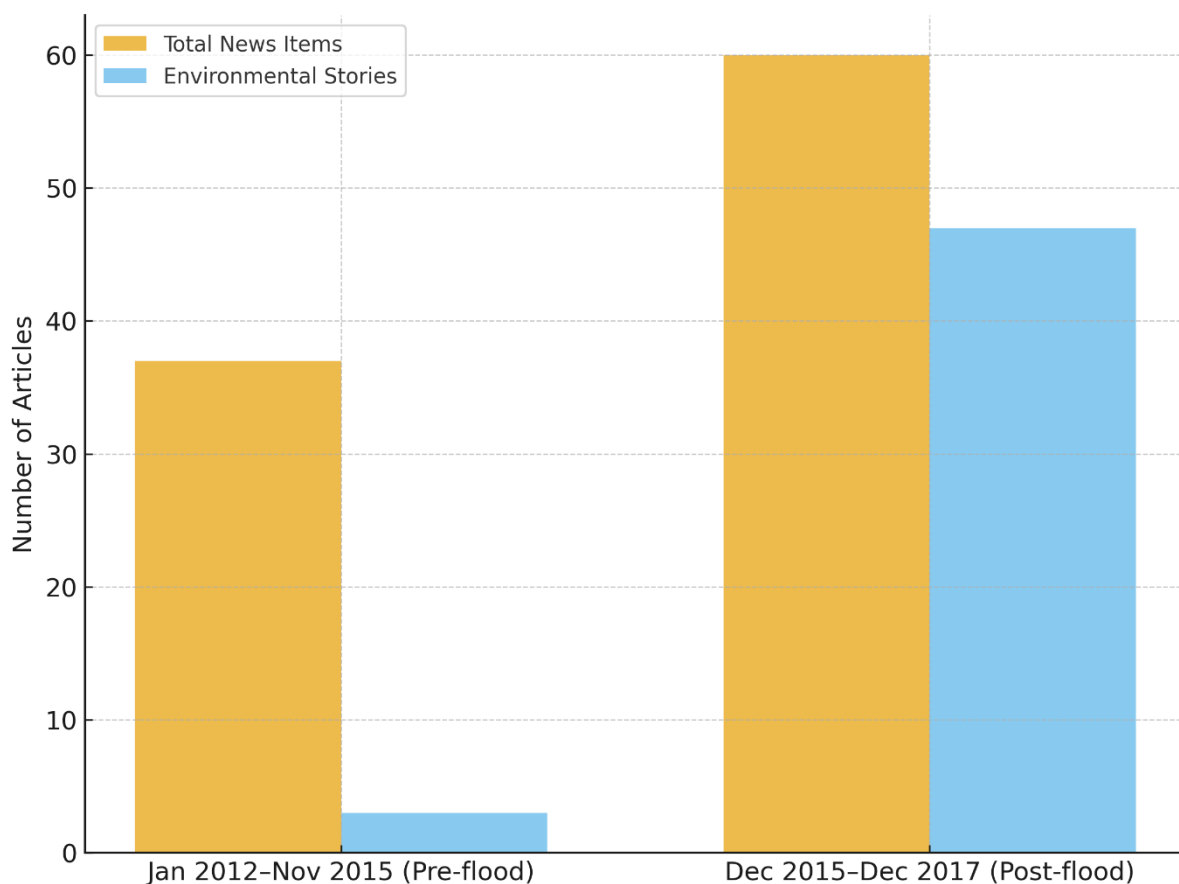
As Cottle (2003) reminds us, the question of whose voices structure news discourse "goes to the heart of democratic views of, and radical concerns about, the news media."

subaltern commentators of their subalternity, the interaction resulted in the formation of a mediated subaltern identity which resulted in new media opportunities and access to self-mediated spaces.

(as cited in Rupar, 2017, p. 219). Journalism’s reliance on official and elite sources sustains these hierarchies, so that inclusion of marginalised voices is less a restoration of democracy than an ongoing challenge to the structural exclusions on which it was built. The entrance of fisher and solidarity voices into the news thus gestures toward a fragile but significant unsettling of this refeudalised public sphere (Habermas, 1989).

Figure 9

Media coverage of Ennore before and after 2015 floods

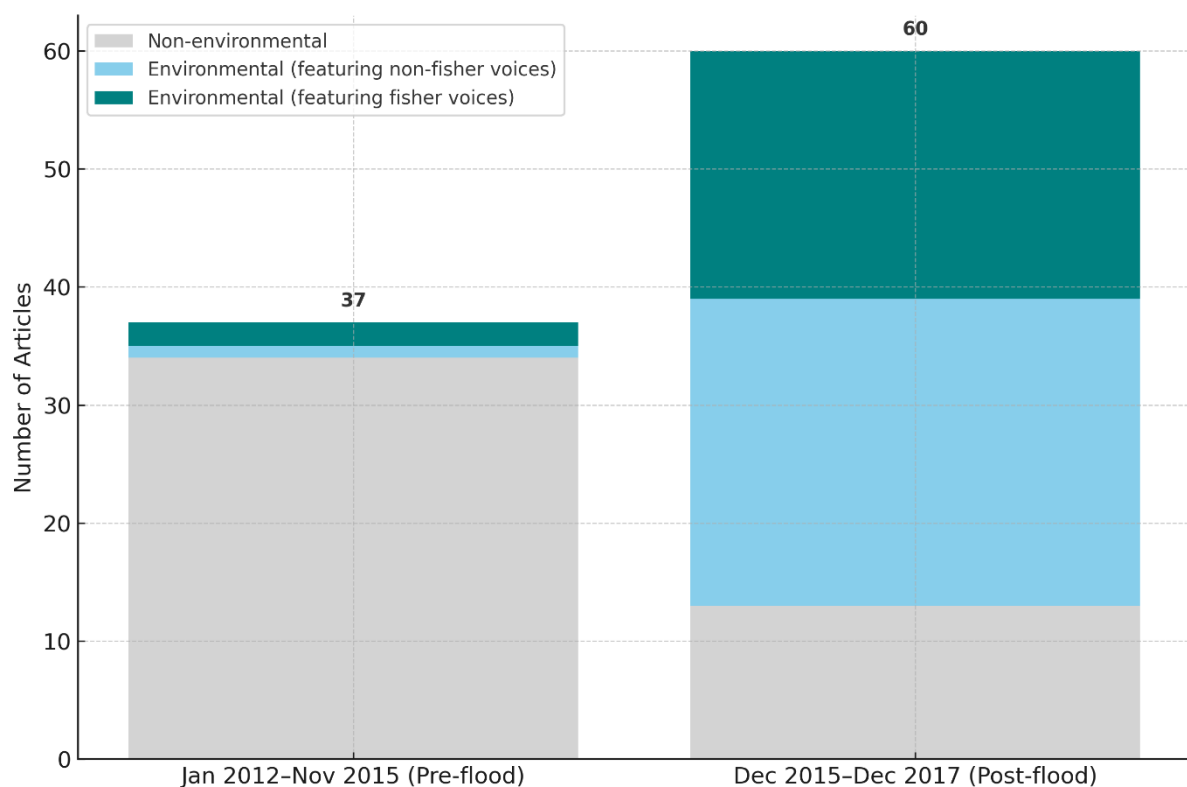


Cultivating the counter-public sphere to remain visible and gather strength required constant work. Between 2016 and 2023, SECC conducted more than 200 toxic tours for over 2,000 participants—bureaucrats, scientists, artists, youth, and others. These tours through the industrial badlands of north Chennai reduced “remoteness” (Plumwood, 1999, p. 193), primed audiences for solidarity, and directly influenced campaign allies. This investment was borne out by experience. The songwriter, singer, film director, and production team involved in the making of CPP were all beneficiaries of these tours and the insights shared by Ennore’s fishing communities.

In July 2022, the NGT, relying heavily on an expert committee report (Joint Expert Committee, 2022), directed the government to restore Ennore’s wetlands based on the 1996 CZM plan (Ravimaran R. (Died) & Ors v. Union of India, 2022, p. 165). Several committee members had, over the years, joined toxic tours, absorbing fisher narratives firsthand.

Figure 10

Media coverage featuring fisher voices before and after 2015 floods



The interventions described in this chapter transformed Ennore from an absent place in the public imagination into a recognised site of ecological and political significance. Through song, toxic tours, and sustained solidarity work, fishers and their allies used visibility to assert epistemic authority, unsettling the representational hierarchies that had long silenced them. The counter-public sphere they cultivated did not replace the mainstream but reframed it to force institutions to see and hear long ignored realities. This emergence from erasure in the realm of discourse laid the groundwork for the next terrain of struggle — the material and spatial reclamations explored in the following case.

7.3. Case 2: Embodied Counter-mapping

The ‘fraud map’ case discussed in Chapter 6 (See Section 6.4) illustrated the state’s use of landist environmentalities (Agrawal, 2005) as a mode of erasure. This case shows how fishers and SECC exposed this fraud and enforced the CRZ law. Through legally-informed protests and public events, fishers reasserted their knowledge of the wetlands, enhanced their standing as their guardians, and advanced a subaltern counter-history that challenged the state’s narrative. Two laws—the CRZ Notification and the RTI Act, 2005—were critical. They enabled legally literate fishers to secure an edge, generating politics that bolstered self-esteem, social status, and legal protections, while delegitimising the fraud map.

Between 2013 and 2015, when we were learning from the fishers, elders who remembered the wetlands before industrialisation pointed out sites now occupied by power plants and ports. SECC activists plotted these memories onto cadastral maps, which were then shared with fishers. This back-and-forth translation between fisher representation of place and the state’s Cartesian spatiality became a foundation for counter-mapping.

By 2016, activists began unearthing official CRZ maps used to appraise industrial clearances. None was publicly available.⁶⁵ Enquiries conducted by SECC activists with other coastal advocacy groups paid off. Through its contacts, SECC obtained a copy of Sheet No. 2 of the 1996 CRZ map from Coastal Action Network.⁶⁶ Approved by the Union government, the map declared the entire Ennore wetland as tidally influenced and protected. SECC estimated that at least 1,090 acres were already illegally occupied (Save Ennore Creek Campaign, 2017a, 2017b).

In January 2017, SECC launched an RTI investigation to confirm whether the 1996 map had been superseded (Save Ennore Creek Campaign, 2017b, p. 8). On June 21, an activist was shown a colour map at the State Coastal Zone Management Authority

⁶⁵ Approved CRZ maps were to be disclosed on the state Department of Environment’s website.

⁶⁶ Coastal Action Network, an NGO based in Nagapattinam, Tamil Nadu, had obtained all CZM maps in 2006 using the RTI Act.

(SCZMA) office. That map was an unapproved never-published version that erased 6,500 acres of tidal wetlands and relabelled them as “Petrochem Park TIDCO project” (Save Ennore Creek Campaign, 2017b). A day later, SCZMA recommended clearance for KPL’s expansion covering 1000 acres of wetlands citing this fraudulent map as justification (Save Ennore Creek Campaign, 2017b) and claiming it was “revised and approved” in 1997 (Save Ennore Creek Campaign, 2017b, p. 3). On July 20, a reply to a different RTI application confirmed that the 1996 map remained the only approved version (Save Ennore Creek Campaign, 2017b, p. 6). Table 6 summarises the chronology of the RTI campaign that revealed the fraud.

Table 6

RTI campaign for CRZ map: A chronology

Date	Action/Event
December 2016	SECC obtains copy of Sheet No. 2, 1996 CRZ map (henceforth 1996 CRZ map). Map declares entire wetlands as protected.
January 2017	SECC begins RTI investigation into legal status of 1996 CRZ map
21 June 2017	An SECC activist is shown a map obliterating the wetlands protected by 1996 CRZ map
22 June 2017	SCZMA recommends KPL’s expansion despite fisher/SECC’s objections
3 July 2017	SCZMA Member Secretary justifies recommendation by furnishing map shown to SECC activist. Claims it was “revised and approved” in 1997.
20 July 2017	RTI response reveals that 1997 map was not approved.

The fraud operated at two levels: First, it erased the wetness of lands already protected by the 1996 map. Second, it was falsely presented as a government-approved map. This

was not an accidental omission but weaponised ignorance: a deliberate betrayal of public trust for industrial gain. Epistemically, it displaced fishers' legitimate knowledge of their wetlands with the state's illegitimate ignorance.

On July 21, Ennore fishers and SECC released both maps at a press conference, and their press release claimed "CRZ Regulator Manipulates Documents; Denies Existence of Ennore Creek" (Save Ennore Creek Campaign, 2017a). The story received wide coverage, with a prominent national daily quoting fisher leader R. L. Srinivasan's warning: "If we lose the creek and the mighty Kosasthalaiyar [river] floods during the next rain, nothing can save the city" (Oppili, 2017). Even two years after the 2015 floods, the event's focusing power remained strong.

Earlier in this chapter, in a glancing reference to the Policy Feedback theory—which holds that policies respond to politics and actively generate political effects and shape future policies—I noted that policies such as CRZ Notification and RTI Act beget politics that shape future policies (Mettler & Mallory, 2018). The RTI Act was created to "promote transparency and accountability in the working of every public authority" (Government of India, 2005), while the CRZ Notification sought to protect the coast and fisher rights. Together, they became instruments that not only revealed fraud but also vindicated fisher knowledge, providing an enabling basis for the political assertion of rights.

We will never know whether the fraud map—and the false claim of its approval—was concocted to legitimise past violations or pave the way for future ones. What is clear is that by October 2017, KPL was moving to fill another section of wetlands on the strength of SCZMA's illegal recommendation from June that year (TNN, 2017).

Anticipating this, the campaign had already petitioned the Expert Appraisal Committee of the Union Ministry of Environment, Forests and Climate Change demanding that the SCZMA recommendation be disregarded. The Committee initiated an investigation and advised against granting clearance until the matter was examined (T. Haque, personal

communication, October 23, 2017)⁶⁷. The committee's decision illustrates how institutions must respond when confronted with allegations of injustice. Yet, such responses are rare, usually hinging on the personal integrity and worldview of individual committee members rather than any structure of accountability. In this case, I had interacted with the chairperson on earlier occasions and was aware of his integrity and concern for the environment; I had written to him myself and encouraged the fishers to do the same.

Armed with the Committee's cautionary stance, SECC and the fishers pursued two highly visible tactics—first, a series of celebrity visits, and second, a spectacular protest. They organised two celebrity visits—one by cinema actor-turned politician Kamal Haasan who learnt about Ennore through the music video, and the other by M.K. Kanimozhi, a Member of Parliament from Dravida Munnetra Kazhagam (DMK), then principal opposition party in Tamil Nadu. In both cases, SECC reached out and facilitated the visits. Media coverage was extensive, and both celebrities endorsed the fishers' warnings about the folly of industrialising over wetlands.

Overcoming marginality requires tactics to counter the tendency to view ordinary people—especially marginalised groups—as inferior knowers. Such credibility deficits are often “rooted in blatant stereotypes” (McGoey, 2021, p. 25), in this case linked to the fishers' marginal caste status, producing what Miranda Fricker calls “testimonial injustice” (cited in McGoey, 2021, p. 25). Although the fishers know far more about the wetlands than the two celebrities, they deliberately piggybacked on the latter's credibility excess—credibility without credentials—to mitigate their own credibility deficit and amplify their narrative.

On January 3, 2018, the fishers staged a *neer* (water) *satyagraham* (an act to underscore the truth). Energised by the celebrity endorsements, they mobilised a massive flotilla of boats carrying men, women and children to a section of the wetlands being eyed for port development, and falsely depicted as land for a petrochem Park in the fraud map.

⁶⁷ Acting on the complaint, the chairperson of the Expert Appraisal Committee, Dr. T. Haque, set up a sub-committee to inspect and submit a report on the alleged illegalities. The Committee subsequently submitted a report that put paid to KPL's plans of developing port infrastructure within the wetlands.

Standing waist- to chest-deep in water, holding placards that declared “This is Water, not Land,” they chanted “aaru than uyiru” (See Figure 11). That simple act refuted the fraud map’s claim by demonstrating—with their bodies—that the land supposedly available for development was, in fact, three to four feet of standing water.

The demonstration hastened the end of KPL’s dubious adventure in the wetlands. Two days later, an expert team constituted by the Union environment ministry’s EAC visited Ennore in response to fisher complaints. Its report vindicated the fishers’ assertion about the wetness of the lands, and insisted that “no activity shall be carried out in this zone” as “wet lands are more important than the development activity” (Ministry of Environment, 2018).

Figure 11

Neer satyagraham



Note. Kattukuppam Fishers Stage a Protest in Water Claiming “This is Water, not Land”.

Copyright 2018. Steevez Rodriguez.

The intervention not only vindicated fisher knowledge; it also “un-made” (Feola, 2019, p. 977) the state’s plan by exposing the map as fraudulent. Official acknowledgement in the form of a court order upholding the 1996 map as the only approved one would come only three years later. The court order hinged on the matter of approval. Had the Union government approved the fraud map, that would have legitimised fraud at the highest level, making it virtually impossible to prove that the river was water. Courts are prone to vest government agencies and official documents—maps, plans, paper—with unwarranted credibility, even when faced with contrary, irrefutable, evidence offered by

‘inferior’ knowers. Even when the court was convinced that the 1997 map was not approved, it did nothing to disturb all the projects that had come up within the No Development Zone by fraudulent means. That is the power of dominant ignorance (see Section 6.4, Chapter 6).

In the previous case, fishers had upscaled their struggle, moving “from one level of abstraction—attached to place—to another level of abstraction capable of reaching out across space” (Harvey & Williams, 1995, p. 85) and making Ennore relevant to Chennai, and other places grappling with urban flooding. Here, their embodied spatial politics were downscaled, revealing the nuance of place, even as it exposed the place-erasing tendency of the state’s spatial production (Butler, 2012).

Successful strategies must balance both: upscaling to make local struggles legible across space, while preserving the particularity and territorial integrity of place and struggle. Williams (1989a) called this “militant particularism”—the forging of universal ideals from the lived particularities of one struggle (cited in Harvey & Williams, 1995, p. 83).

From a Lefebvrian perspective (Lefebvre, 1991), the state enforces control through the production of abstract space—space stripped of relationality, fragmented into property lines, homogenised into land-use zones and governed by hierarchised institutions and a dominant discourse that sustains the homogeneity of the territory (Butler, 2012). Such stripping occurs through an active production of multi-dimensional ignorance—of local meanings of place, consequences to human and non-human communities, and of any instruments, including laws, and institutions (formal and informal) that might render such meanings and consequences visible. This epistemology of ignorance elevates and legitimises a narrow body of knowledge, histories and memories—including by illegitimate means—while suppressing a sprawling bed of subjugated knowledges and memories of place.

The campaign’s scale-shifting practices, enacted “through alliances, relations, networks and counter-hegemonic discourses” empowered the fishers and reduced asymmetries in power (Ahmed, 2012, p. 1064). Yet this empowerment was not only institutional but also affective and spatial. By re-occupying erased wetlands through

collective action and law-enabled visibility, fishers translated legal literacy into a politics of emplacement. Their protests, maps, and bodies together re-inscribed the wetlands with meanings that bureaucratic cartography had effaced. Drawing on Sen and Silverman's (2014) notion of embodied place-making, "fishers undid the state's treatment of the creek as uninscribed earth by bodily reinscribing it with their sense of place" (Jayaraman et al., 2025, p. 267). Through these embodied counter-mappings, the struggle turned legal instruments like the CRZ and RTI Acts into relational tools that linked bodily knowledge, ecological memory, and juridical legitimacy to territorial claims. The wetlands thus became a site of resistance and more; they became a living archive through which subaltern actors insurrected buried knowledges to translate their right to exist into the languages of law, geography, and citizenship.

By tracing erased geographies with their bodies, the fishers did more than redraw a map—their resistance exposed the state's geographical portrayal of the wetlands, and unsettled the very grammar of what counts as knowledge. In reclaiming the wetlands as a lived space, Ennore's fishers embodied a politics that answered the question of how subaltern struggles emerge from erasure: not by demanding inclusion, but by revealing that many worlds already coexist beneath the map's produced silence. The next case turns from cartographic to culinary space, following how fishers—especially women—extended this politics of presence into the intimate realm of kitchens and gatherings, where cooking, food and place became media for collective empowerment and ecological storytelling.

7.4. Case 3: Cooking Food to Power

In 2019, Adani Ports, India's largest private sector ports, logistics and infrastructure company, announced plans to expand a newly acquired port in Kattupalli island bordering the Ennore-Pulicat wetlands. Port-handling capacity of coal, crude oil, hydrocarbons, bulk cargo and automobiles was to increase from 25 million tonnes per annum to 320 million tonnes per annum (L&T Infra Engineering, 2020). The port's footprint would grow from 136 hectares (ha) to 2472 ha.

The Environmental Impact Assessment (EIA) report viewed the site solely as a "strategic location" offering "logistics advantages" to attract "substantial traffic" and describes it

as follows: “Present *land use is sea*, intertidal area, sandy area/beach, abandon (*sic*) salt pans, and land with/without scrub and sparse vegetation” (L&T Infra Engineering, 2020, p. 2-39. Emphasis added). The promoter’s land-ist, commodity-oriented perspective is revealed by the depiction of the sea as merely one of many land-uses; other uses are shorn of value through lifeless words (intertidal area, sandy area/beach), adjectives such as “abandon(ed)” or deprecating descriptors of land as “with/without scrub” or “sparse vegetation”. Thus devalued, the commons are easily enclosed. Of the 2,472 ha project area, 796.15 ha was to be created through “proposed sea reclamation” (L&T Infra Engineering, 2020, p. 2-39). An additional 800 ha of tidal wetlands and *poromboke* commons was also to be land-filled (Jayaraman, 2021a).

Kattupalli island already hosts two ports, commissioned in 2001 and 2011 respectively, both built amidst protests and promises (since broken) of employment. Choice fishing grounds in the nearshore waters were dredged, deepened and enclosed by breakwaters to create safe harbours for ocean-going vessels. An entire village with 140 fisher households was evicted, promised permanent jobs and betrayed when the current port—slotted for expansion—was first built (Kattupallikuppam villager, personal communication, May 5, 2023).

Adani’s proposal, and the land-use change it portended, triggered vigorous protests. Drawing on solidarity mobilised by city activists, youth groups and artists, Pulicat fishers mounted a campaign that unfolded over two years. The joint campaign used diverse tactics—heritage tours, nature trails, innovative social media explainers, counter-mapping and gastro-activism using seafood festivals—to disrupt the dominant narrative of port-led development with their slogans #StopAdaniSavePulicat and #SavePulicatSaveChennai.

With state elections slotted to be held in April 2021, opinion makers and political leaders across party lines followed quickly. For political parties, this was less out of ideological alignment with fishers’ spatial politics and more a result of electoral pressures. Particularly among members of the DMK, the principal opposition party in the state, the protests reflected not solidarity with the fishers so much as resistance to Adani’s closeness to the Bharatiya Janata Party (BJP), a right-wing, north Indian and

upper-caste Hindu nationalist party. The DMK subscribed to a Dravidian (south Indian, non-brahmin) ideology that challenged BJP's brand of nationalism.

Drawing on public and opportunistic political support, Pulicat fishers asserted that the project site was not empty "land" but seas, backwaters, and dunes that sustained cultures, identities, lives and livelihoods. Days before a statutory public hearing scheduled for January 2021, the state government succumbed to public pressure and called it off (Narasimhan, 2021).

As noted earlier, this success resulted from a struggle that combined diverse tactics by a wide range of actors. This section focuses on a gastro-activist campaign led by women that sought to touch Chennai residents' hearts through their stomachs, forging ties of solidarity between them and the seas and lagoon of Ennore-Pulicat. In January 2020, fisherwomen from Pulicat teamed up with activists from Vettiver Collective, the Chennai-based non-profit InSeason Fish, and Chennai Kalai Theru Vizha,⁶⁸ a volunteer-led street arts festival celebrating diversity and equality. Their city partners brought in Sea Salt, a well-known seafood restaurant in Chennai run by people eager to support the fisher campaign. Together, they announced a three-day Pulicat Seafood Festival to celebrate the World Wetlands Day on 3 February 2020.

Seventeen women, led by my participant G. Rajalakshmi, provided the content—fish, recipes, food and stories—for the festival. They conducted a cooking workshop for Sea Salt's award-winning chef. Widely covered by national media (Chaitanya, 2020; Sivapriyan, 2020), and even by Rohan Chakravarty (2020), a well-known nature cartoonist (See Figure 12), the workshop put the women in the teacher's seat and the MasterChef as the student (Jayarajan, 2020; Kannadasan, 2020). Together, they curated a menu to showcase the fish diversity and culinary treasures hidden in a region so deprecatingly described by port promoters.

The menu featuring fish from different habitats at sea and in the backwaters, was a culinary counter-map to Adani's lifeless land-use categories. A highlight was *Semakker*

⁶⁸ The Vizha (festival) is an initiative supported by the Vettiver Collective that began in 2014 as the Urur Olcott Kuppam Vizha following a discussion between T.M. Krishna, a well-known musician, Saravanan (my colleague) and myself.

Karkathu, a slow-cooked shell-on prawn dish with chilli flakes and raw sea salt, unheard-of outside the fisher community. “We make *Karkathu* when our men go for *thaangal* (overnight fishing) to hunt the big fish. It does not spoil. They love it and wait eagerly for eating time. We prefer to use the *Semakker* [*Fenneropeneaus indicus*] for its flavour. It is abundant in the lagoon,” Rajalakshmi explained at the workshop (G. Rajalakshmi, personal communication, January 23, 2020).

Figure 12

Adani port and Pulicat fisherwomen



Note. A well-known nature cartoonist’s post on Pulicat women’s seafood fest. Copyright 2020 by Rohan Chakravarty. Reprinted with permission.

For each item in the menu—*Kaanaankeluthi puttu* (shredded spiced mackerel), *Aaththu Nandu rasam* (mudcrab pepper soup), *Vellra biryani* (spiced rice with white prawns), *Kezhangam varuval* (fried ladyfish, *Elops saurus*)—the women paired recipes with stories that linked fish, fishers, local economy, ecology and place (See Figure 13).

Pulicat prawns, crabs and fish are very famous. Our fish is special. People know. If it is Pulicat fish, they will [buy it at any price]. We held a seafood festival in Chennai to warn people that if Adani port comes, our fishery abundance will be destroyed. There will be no fish for us to hunt. Fish, prawn, crab all will disappear. With that our livelihoods.

(G. Rajalakshmi, personal communication, March 7, 2024).

Figure 13

Culinary cartography: Linking place to food.



Note. Invitation to the Festival and the Seafood Thali. Chennai Kalai Theru Vizha, 2020.

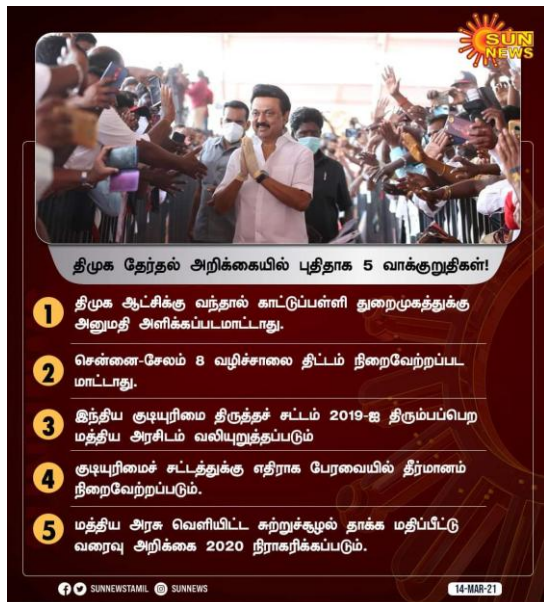
The seafood festival formed part of a larger arts festival punctuated by day-long activities—a biodiversity tour of the dune-studded Kattupalli islands, a heritage tour of the historic port town of Pulicat,⁶⁹ a seafood-and-vegetarian lunch drawn from local traditions, and a music and dance festival on the lagoon banks. Food lovers, young naturalists, heritage enthusiasts, and art lovers mingled with the people of Pulicat. The music and dance fest drew thousands of locals, making it the largest secular gathering in the seaside town in years (personal communication, February 20, 2020).

⁶⁹ As a historical port town, Pulicat is multicultural, featuring Indigenous, Dalit, Pattinavar fisher, Muslim and Christian communities and their cultures. This is what the women refer to later in their invitation to the Chief Minister.

In December 2020, the Tamil Nadu Pollution Control Board announced a statutory public hearing for the port project. Pulicat fishers and activists called for its scrapping. Their appeal sparked a groundswell of opposition. The then Leader of the Opposition and head of the DMK party (now Chief Minister) posted a tweet condemning the project and promised to cancel it if elected. The tweet mirrored the campaign's narrative and reflected the discursive success of the struggle. In March 2021, the DMK formally included the promise in its election manifesto (Sun News Tamil, 2021) (See Figure 14).

Figure 14

DMK's promise to cancel port project



Note. DMK's manifesto includes promise to deny permission to the port project in its election manifesto (Sun News Tamil, 2021).

Later in 2021, women once again used food to hold the Chief Minister to his word.

Though the public hearing had been cancelled, the prospective license given to the port remained valid. Rajalakshmi explained:

The port proposal is like a sword hanging over our heads. If they dump rocks into the sea [to build the harbour], the *seawater will enter the village*; people will no longer be able to live here; Adani intends to survive by finishing all of us.

(G. Rajalakshmi, personal communication, March 7, 2024. Emphasis added).

Ports along India's east coast have disrupted the sediment-laden longshore currents, causing massive erosion north of the harbours' breakwaters. By highlighting how the sea would react to rock dumping, Rajalakshmi debunked the portrayal of the sea as inert nature. As with Ennore fishers invoking the agency of rains and floodwaters, Rajalakshmi stressed the purposiveness and responsiveness of the sea, showing how more-than-human agents could disrupt human plans.

In an open letter inviting the Chief Minister to a home-cooked seafood feast in Pulicat, the women used food to highlight the centrality of women's labour in the local economy and articulate the disruptions that the port would bring:

Fish is among the healthiest of foods, and Pazhaverkadu (a.k.a. Pulicat) is famous for its tasty, wholesome and healthy seafood. . . . As women, we do a lot more than just cook fish—from catching fish, to curing it, auctioning and marketing it and adding value to the fish catch in myriad ways, women are the backbone of the fisheries economy of the region. . . food is important. In food, there is tradition and the inherited wisdom of our women ancestors. . . The nearshore area that Adani wishes to convert into land is one of the most productive areas in the sea. Fish are not found everywhere. The best places to find them are where the ocean floor has *Paar* (rocks/reefs) or *Seru* (mud). . . The portion of the sea where Adani's port is proposed has six *seru paguthi* (muddy sections). These seru are so important to our livelihoods that we have given each its own name—Alamaram seru, Lock seru, Kalanji seru, Kalanji koda seru, koda seru. These are the grounds where the kanankeluthi (mackerel), mulima, panna (cod), kala (threadfin), kadal kezhangam (ladyfish), udupathi (bartail flathead), navarai (goatfish), Sankara (snapper), semakkera (prawn), vellra (white prawn) and kadal nandu (sea crab) graze. . . Our recipes are as rich and diverse as Tamil society. . . We believe our multicultural food and our peaceful seaside location will please your palate and relax your mind. . . With love and respect. Women of Pazhaverkadu. 9 September, 2021.

(Translated from Tamil. See Coastal Resource Centre, 2021).

By naming the *seru*, the women enlivened places described in lifeless terms by port promoters. They gently taught the Chief Minister that “fish are not found everywhere” in

the sea. The invisible muddy grounds—slated to be turned into land or dredged for the harbour—were valorised and personalised, and revealed as intimate enough to deserve names.

Through food, the women mounted two insurrections that were subtle, non-confrontational, yet potentially political. First, they asserted that wild, capture fisheries were not merely sources of livelihood, but also of food and nutritional sovereignty, embodied in women's labour and celebrated in culinary delight. This countered the agrarian, landist bias that marginalises fish and seafood in debates on nutritional security and food sovereignty, particularly for the coastal poor. Second, they challenged the vegetarian, north Indian, upper-caste Hindu identity embodied by Adani and its ally, the BJP. By hosting a seafood festival and inviting a Dravidian Chief Minister to a seafood feast, they engaged in culinary politics that bound territorial solidarity to Tamil heritage and food culture. Their gentle reminder to the Chief Minister that women do more than just cook fish drew attention to their own standing to comment on fish, fishing, and economy, to critique the rationale of Adani's proposal and to the hidden labours and relevance of women beyond the domestic setting.

The way the women connected seas, *seru*, and fish with consumers in Chennai should be read as a culinary cartography of “forms of experiencing and remembering” marginalised realities (Medina, 2011, p. 11). Food here becomes a tactical tool to “assert epistemic agency and repair misrecognition” (Jayaraman et al., 2025, p. 13). As a geographical project, it offered new ways of relating to place and bringing it from the margins into the centre.

Naming the *seru* in the invitation letter was not innocent, but part of a larger campaign to claim territory at sea. The CRZ Notification requires CRZ maps to demarcate fishing grounds and fish breeding areas. Despite repeated reminders, the state government had failed to reflect these areas in their drafts. Working with SECC, fishers co-created digital sea maps highlighting fishing grounds. Fearful of losing their productive areas, Pulicat fishers made submissions to the SCZMA and vociferously protested during a public hearing to ensure the *seru* sections were included (Chaitanya, 2018).

Names convey an intimacy between namer and named. Pulicat fishers' name-and-claim strategy underscores belonging and first right to the seas. These spatial representations are politically potent, rooted in regional political sentiment, histories of subjugation and the politics of food.

The struggle also opened space for women to break out of patriarchal confines and build relationships with activists, artists, restaurateurs, and youth beyond their community. This cultural transformation is likely to endure. Rajalakshmi reflects:

The experience of engaging in struggle has allowed women to emerge as leaders. In our community, young women cannot even come out of the house. . .I would never dare to even open my mouth in front of men. . .But over the years, we have engaged in several public battles aided by NGOs. Now, every village has four to five women who are articulate, know the officials in various departments. This is through our exposure to struggle.

(G. Rajalakshmi, personal communication, March 7, 2024)

At the local level, women's engagement in the seafood festival foregrounded the invisible labour of women and breached deeply patriarchal norms within fisher society, enabling new forms of grassroots leadership (Agarwal, 1992). This is significant in the context of the highly patriarchal Pattinavar fishers, where decisions are taken exclusively by men (Kelkar & Nathan, 1992). The agency of women disturbs patriarchal structures that reduce women's "bargaining power both within and outside the household" (Agarwal, 1997, p. 33) and sustain gendered hierarchies (Kelkar & Nathan, 1992). The seafood festival offered a non-confrontational but potent way for women to step into public space, to speak for the community, and to reinforce their economic value both within and beyond the village.

The space women gained in public life was not simply self-created; it was also negotiated within the community and grudgingly conceded by men. Rajalakshmi noted that winning space inside the community was harder than gaining acceptance outside. Family support and solidarity from allies were crucial even for fostering intra-community acceptance. In Pulicat, such solidarity came from a faith-based charity that

encouraged women's participation and successfully intervened on their behalf with the village administration (G. Rajalakshmi, personal communication, March 7, 2024).

Their culinary cartographies extended their networks of solidarity. Food became a vehicle for storytelling and a sensuous archive of subjugated histories—of places, livelihoods, and the women who sustained them. These acts of remembering and storytelling through food powerfully recirculated ignored knowledges, and countered erasure by expanding the terrain of struggle to include emotion, memory, and multispecies agency.

7.5. Conclusion

Across the three cases, erasure appeared in distinct but connected forms: as representational silence, as cartographic abstraction, and as ecological or ontological flattening that obscured the sea's agency, the vitality of sediments, and the relational territorialities that tied fishers to their waters. Each was a mode of ignorance that rendered fisher life invisible within bureaucratic, legal, and social orders. Against these, fishers and their allies staged epistemic insurrections that reclaimed voice, space, and relationality. Mobilising more-than-human agents and the support of solidarity workers, they transformed ignorance from an instrument of domination into a terrain of struggle. The chapter thus traces a movement from reclaiming voice through song and storytelling, to reconstituting erased geographies through embodied mapping, to reweaving relations among people, place, and the sea through the intimate politics of food. Cumulatively, they present a strategy of emergence through which subaltern knowledges and knowers made themselves felt and listened to.

Building on these epistemic insurrections, fishers resisted erasure through legally literate action. Their efforts not only exposed the government's narrative as inaccurate but also reclaimed the wetlands' significance and fishers' knowledge of them. This oppositional struggle was profoundly epistemic, attending to what knowledge was made (river, seas and place as life, not property), how it was made (through decolonial arts, embodied and performative counter-mapping and gastro-activism) and where it

was made (in the river, seas and littoral places, kitchens and restaurants, not in offices or universities).

In resisting erasure, their epistemic practices also subverted the colonial logics of knowledge production by producing knowledge for “well-being rather than [for] controlling and managing populations for imperial interests, or for the purposes of accumulation”(Mignolo, 2009, p. 177). Emanating from the worldview of the fishers, the form, media and content of their communications also rejected colonial norms. They countered policy not only with evidence-based critiques or counter-policy notes but also with songs and visuals, food activism and embodied actions such as the *neer satyagraham*.

Taken together, these struggles exemplify a form of ‘amphibious activism’ designed to overcome dominant ignorance in its different guises. By amphibious activism,⁷⁰ I refer to a mode of resistance practised by littoral communities, rooted in their lived experience of inhabiting and moving between land and water to contest dominant spatial orders. Emerging from fluid, in-between spaces of coasts, estuaries, and lagoons, amphibious activism mobilises the material, cultural, and political power of water to reassert wetness as identity and territory. Through embodied practices such as counter-mapping in water, linking food and livelihood to marine and riverine ecologies, and reinscribing the littoral as a hydrosocial landscape, amphibious activism exposes and disrupts state attempts to render these spaces as dry, empty land for capitalist appropriation. It transforms a nuanced place-based geographical knowledge into political force, unmaking dominant spatial plans and asserting radical alternatives incompatible with modern capitalist configurations.

On paper and on the ground, the fisher-activist campaign has achieved significant victories. It has brought back the river once banished from official maps; it has won court orders to notify and revive the wetlands; it has thwarted degenerative

⁷⁰ This term was first mentioned in Bremner et al. (2025) but left undeveloped and undefined. I use the cases here to elaborate on the term. See Bremner, L., Jayaraman, N., & Coelho, K. (2025). Contested Good City Stories from a North Chennai Littoral. *International Journal of Urban and Regional Research*. <https://doi.org/10.1111/1468-2427.70000>

transformation of thousands of acres of sea and tidal wetlands; and it has delayed or defeated plans for new power plants and industrial parks that would have worsened pollution and degraded the wetlands. It has enhanced recognition of subjugated knowers and their narratives. At the local level, women's engagement in the seafood festival foregrounded the invisible labour of women and breached deeply patriarchal norms within fisher society, enabling new forms of grassroots leadership (Agarwal, 1992).

Ultimately, as I outline further in the following chapter, these struggles against dispossession also assert ontological politics (Escobar, 2016; Tornel & Dunlap, 2023)—the presentation of different visions of a different world through mapping, singing, cooking, naming and exposing ignorance. In doing so, the cases show how fishers rejected the dominant dualistic ontology that treats nature as a domain for exploitation, wise use or conservation, and instead highlighted alternative realities that recognise nature's agency and the inter-relationalities tying people to place. No longer merely people making a living of the environment, fishers and women presented themselves as environmental knowers, protectors and managers. The ontological politics of their struggles lies in how they unravel the “political economy at play in managing nature” by agitating the question of “what is at stake, who is struggling, and who gets to decide what is at stake in environmental conflicts” (Flemmer et al., 2024, p. 608).

Across the three cases, these struggles reveal transformative tendencies operating at multiple levels. At the personal level, participation in collective resistance fostered confidence and belonging; at the gendered level, women's food activism quietly breached patriarchal barriers to assert epistemic agency; and at the societal level, solidarity interventions disrupted a refeudalised public sphere, mounting a continuing challenge to the exclusions on which it was built. These layered transformations foreshadow the broader discussion in the following chapter on how such struggles begin to re-make the very conditions of knowing and being.

Chapter 8

Subaltern Futuring and Sustainability: The Politics of Transformative Resistance

Chapter 7 explored how subaltern fishers claimed epistemic status by unsettling ignorance. This chapter turns to the transformative processes and outcomes that these ruptures both revealed and set in motion. From an epistemology of resistance, Chapter 8 shifts to a political ecology of sustainability transformation: how resistance is an act pregnant with transformative possibilities, opening spaces of commoning, solidarity, and spatial reconfiguration with both discursive and material effects. Transformation here is not treated as a distant goal but as something co-emergent with resistance, present in the very moments of rupture and manifest in the altered self-image of fishers and in the reconfigured relations among fishers, and between them, the state, and the commons.

How do subaltern struggles for environmental justice contribute to transformative change for sustainability? I address this research question by applying the Political Ecology framework of Transformative Resistance (hereafter, referred to as the framework or Transformative Resistance framework), developed in Chapter 4, to the three case studies already discussed in the previous chapter and to one additional case introduced here. As outlined in Chapter 4, the conceptual framework incorporates elements from Lefebvre's work on urban theory (Butler, 2012; Lefebvre, 1991, 2003a), Dunlap's (2020) proposal of insurrectionary political ecology, and theories of subaltern resistance (Chandra, 2015). The framework identifies four attributes of transformative resistance, namely, Enduring, Commoning, Opening Up (Insurgent occupation) and Re-energising. (See Table 4, Chapter 4). This chapter begins with the *People's plan for eco-restoration of Ennore wetlands* (Jayaraman et al., 2024) as an additional case, before applying the framework to analyse this plan alongside the cases presented in Chapter 7.

8.1. People's Plan⁷¹

The People's Plan for Eco-restoration of Ennore Creek, which I present below, is a case of subaltern futuring aimed at two important objectives: first, to expose the epistemic blindness and the relationality- and place-erasing tendencies of official plans; and second, to demonstrate how “places, experiences, histories and people that no one know(s) do exist within our present geographical order” (McKittrick & Woods, 2007, p. 4). In other words, the second objective is to articulate how people see and relate to the wetlands and their vision of a repaired, revived relationship with their surroundings.

In 2018, the state government-controlled Chennai Rivers Restoration Trust (CRRT) commissioned a masterplan for the eco-restoration of Ennore Creek (Government of Tamil Nadu, 2018b). Its inception report mirrored a familiar pattern of posing beautification and riverfront development as eco-restoration (Coelho & Raman, 2010), while blaming the poor for the river's degraded state (Government of Tamil Nadu, 2018a). Taking a clean break from both history and the creek's present, the report ignored the wetlands' use by fishers, salt farmers, and shell gatherers as well as their function as habitats of diverse non-human species; the report instead imagined a future of riverside parks and recreational boat clubs. Pollution was attributed to open defecation by the poor, while the real culprits—ports, power plants, city sewage and polluting industries—were barely mentioned. The Ennore fishers' long struggle against wetlands degradation, which had forced the government to commission the project in the first place, found no mention. Despite industrial pollution and encroachment being the central problems, the report addressed neither.

The report's very definition of the creek's boundaries ignored fishers' view of it as a multi-habitat *poromboke* complex comprising *aaru* (river), *paraval* (floodplains), *sathuppu* (marsh), *uppalam* (salt pan), *uppankazhi* (salt marsh), *alayaathi* (mangroves) and *thittu* (islets). The consultant's subsequent report reproduced the state's character-

⁷¹ This case also features in a co-authored article which discusses the *People's Plan* as a counter-mapping activity. See Jayaraman, N., Bremner, L., Coelho, K., Kumar, P., & Kasinathan, S. (2025). Counter-mapping, counter-histories, and insurgencies of subjugated knowledges in the fisher struggle for Ennore creek. *Antipode*, 57(1), 259-281. <https://doi.org/10.1111/anti.13103>.

erasing mode of spatial production by delineating creek boundaries using 1985 revenue maps, rather than drawing on people's lived understanding of wetland micro-habitats or relational interactions between water, people and non-human lifeforms (Government of Tamil Nadu, 2019, pp., p. 4_3). Nor did it even adopt the Government of India-approved 1996 CRZ map. By doing so, the area identified for restoration was drastically reduced. Legacy pollution, such as historical and ongoing coal ash discharges from TANGEDCO's pipes and leaky ash dykes, was excluded from the plan.

The final master plan, released two years later, still failed to address these issues. Industrial effluents were merely to be "monitored;" future encroachments went unaddressed (Government of Tamil Nadu, 2020a, p. 6_22). What was proposed, at significant expense, amounted to mangrove plantation in un-remediated wetlands and engineered interventions for sewage, solid waste and tidal management (Government of Tamil Nadu, 2020a, p. 8_24).

My research participant and co-activist Saravanan and I knew from our earlier experience of contesting CRRT's eco-restoration project in Adyar Creek in 2011 that such 'expert'-led exercises are conceived and executed without community inputs (See Saravanan & Jayaraman, 2011). Acting on our warnings about exclusion, Ennore fishers pressured CRRT to consider their views, by writing letters and insisting on public consultations, which CRRT finally held. Despite the inherent limitations of such government-held consultations, fishers participated in the discussions in 2019 and their inputs raised the project's ambition—from remediating the creek to a level suitable for serving as an urban waste sink (lowest ambition), to a level suitable for "salt pans, shell fishing, mariculture and ecologically sensitive zones" (highest ambition) (Government of Tamil Nadu, 2020a, p. 11_2). Fishers and SECC also ensured that the final report recommended the removal of residual debris that obstructed tidal flows (Government of Tamil Nadu, 2020a, p. 8_16).

I recall a discussion with Kattukuppam village elders at the time about the worth of engaging with the official process (Personal communication, 2018). After all, despite the minor improvements in the final report, its ignorance of the creek's extent and the real sources of its degradation, and its disinterestedness in local communities remained evident. The decision then was to engage with the official process while simultaneously

initiating autonomous counter-processes toward a people's plan for Ennore's eco-restoration.

The first output of this counter-process was a draft plan and work-in-progress map for eco-remediation of Ennore Creek, co-produced with local fishers (Save Ennore Creek Campaign, 2022). This was conveyed to CRRT in 2022 as a critique and correction of the official plan, and was co-developed over several rounds of consultations with fisher leaders and village representatives (all men),⁷² using the 1996 CRZ map as the suggested baseline.

Rejecting the official boundaries, the *People's Plan* map asserted territory (Boelens et al., 2023) and highlighted the ecosystem, health and livelihood damage from decades of abuse. In December 2022, an updated spatial plan—the People's map—was launched at a community event (See Figure 15), identifying interventions required for eco-restoration across the territory (DTNEXT Bureau, 2022).

Yet, this and the earlier map had two limitations. First, they only dealt with spatio-material relations amenable to conventional cartography. Second, they reflected the inputs of male stake-net and cast-net fishers, focusing narrowly on revival of fisher livelihoods. As activists, we had been drawn into the struggle by these men, but through field visits, conversations, and exchanges with progressive members of the community, we became aware of other impacts and interactions—those of women, fishers lower in the caste hierarchy, and non-fisher residents.

Expanding beyond the immediate concerns of the dominant fisher sub-groups (Pattinavar men) required support and trust from within that group. We drew on the reserves of trust built over years and deepened through the mapping process. With their backing, SECC began a year-long process of wider consultations in 2023, exploring ways of representing socio-spatial relations beyond Cartesian map-making. This phase,

⁷² The first round of consultations was restricted to fishermen as the plan that was sought to be developed was prompted by the experiences and aspirations of Pattinavar stake-net fishers. However, given the relevance and varied experiences of fishers from other communities, non-fishers and women of both the wetlands and the surrounding areas, the future editions of the *People's Plan* were developed on the basis of wider consultations.

part of a British Academy-funded project, brought together academics, activists, and fishers to “Reimagine the Good City from Ennore Creek” (Bremner et al., 2024).

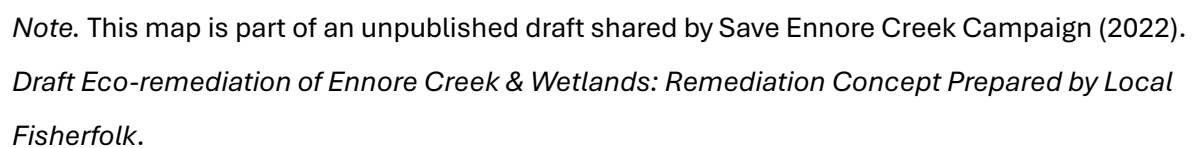
An extract from the final *People’s Plan* report (Jayaraman et al., 2024) offers a glimpse of what the plan sought to represent, while exposing the limits of Western cartography:

There is real magic in this landscape. Fearful and protective spirits, goddesses and their beasts, ghosts of lost seafarers and the nine Annamars who are born to the sea goddess still roam these lands that are dotted with haunted spaces and sacred spots. . . Here the spoken word, rituals, cuisine, place names and belief systems refuse to fit within homogenising averages of culture, language or religion. What may appear to an uninformed eye as a beautiful waterscape, or mounds of sand or the vast nothingness of an ocean actually hides multiple layers of stories and beliefs that tie local people to their water-lands. (p. 24)

The people’s planning exercise “opened fisher knowledge to epistemological incursions from other marginalised groups, including women, salt pan workers, settlers, industrial workers, prawn catchers” (Jayaraman et al., 2025, p. 274). An army of young volunteers, activists, and academics gathered stories, memories, lived experiences and visions for the future using “transdisciplinary environmental humanities methodology and science and arts-based methods” (Jayaraman et al., 2025, p. 275).

Recognising the inability of state- and expert-led restoration to “deal with unquantifiable parameters such as relationships, stories and people’s emotional connect to their lands and waters,” the plan was designed to “draw on local stories, and the emotions and aspirations of local communities to provide a framework for holistic restoration” (Ennore Paathukaappu Kuzhu (Ennore Protection Committee), 2024, n.p.). The final plan straddled four overlapping spheres of relevance, human health as part of ecosystem health, economy, culture and ecology.

First draft map of *People's Plan for Eco-restoration of Ennore Creek*.



The planning process had multiple objectives: to broaden and deepen public engagement within and beyond Ennore; to spotlight eco-social relationalities and expand environmental justice into a more representative notion of ecological justice; to foster collaboration across disciplinary and experiential boundaries—linking physical scientists, social scientists, fishers, activists, artists, lawyers, bureaucrats and youth; to experiment with non-cartesian forms of representing subaltern geographical knowledge; and to prepare a counter-plan for eco-restoration that reflected subaltern aspirations and refused absorption into neoliberal space-making frameworks (Lefebvre, 1991).⁷³ Between 2019 and 2024, more than 100 people—fishers, activists, young volunteers, judges, academics, visual and theatre artists and local residents—were involved in preparing and promoting the *People's Plan*.

A city-based playwright and two theatre directors worked with 11 local children in a four-month workshop to co-write and enact a 40-minute Tamil play, *Oru oorula oru aaru* or *Once there was a river*. The play wove together stories gathered from Ennore with the children's own experiences of growing up in the neighbourhood. Drawing on "Forum Theatre" techniques (Boal, 1995, p. 7) to draw spectators into the stage, the children's performance provoked discussions about the Creek's future and linked Ennore's status as an urban sacrifice zone to larger questions of urban political ecology.

Separately, seven young artists joined a three-day multi-species justice arts residency organised by SECC in Pulicat in June 2023, followed by a four-month-long workshop to visualise gathered data. Four other youngsters turned their cameras toward on their neighbourhoods to produce a film "Poisoned Playgrounds" exposing how Ennore's polluted environment violated children's right to play. The film and play were staged alongside artworks retelling local memories, fears and aspirations in an exhibition titled "ghosts, monsters & DREAMS: Reimagining the Good City," between 26 and 28 January 2024 (Bremner et al., 2024).⁷⁴ (See Figure 16).

⁷³ See discussion on the Lefebvrian concepts of "dominated spaces" and "appropriated spaces" in Chapter 4 to understand how the counter-plan is a tool to undo domination by strengthening "appropriated spaces."

⁷⁴ The arts residency, theatre workshop and film production were all organised under the British Academy project. See Bremner, L. et al. (2024).

The play travelled to five different venues across North Chennai between September and December 2023, reaching over 600 people, before being staged at the exhibition venue in an elite city neighbourhood. The three-day exhibition attracted more than 1,000 visitors, including retired judges, serving bureaucrats, eminent artists and elected representatives. A panel discussion titled “Breathless” where local women shared their embodied expertise of surviving pollution, was held in a packed hall with Dr. Kalanidhi Veerasamy, the local Member of Parliament, present to listen and respond.

The printed *People’s Plan* report was launched at a widely covered community event by three retired High Court judges, who pledged to “ensure that the attention of the government is drawn to the issues of Ennore” (TNM Staff, 2024). Framed around values of “social and ecological justice. . .and the rights of people to know, be heard and influence decisions” (Ennore Paathukaappu Kuzhu (Ennore Protection Committee), 2024), the plan was presented as a formal communication to government. SECC also announced an annual report card to grade the government’s performance in line with the Plan’s aspirations.

Restoration as a technocratic vision flattened the lived realities and relationalities tying local people to place. The CRRT masterplan exemplified such a vision through the production of dominated space—a space abstracted, moralised, and managed in order to maintain bureaucratic control and capitalist order (Lefebvre, 1991). By recirculating casteist tropes that blamed the poor for pollution while remaining silent about powerful polluters, it displaced accountability and moralised inequality. Such framing translated historical dispossession into a question of behaviour, not power, and re-enacted domination under the guise of ecological virtue.

The counter-plan unsettles this. It reasserts the right of inhabitants to shape and signify their world, appropriating and transforming dominated space into a lived, affective, and collective place remade through use, memory, and imagination (Lefebvre, 1991). In this sense, the *People’s Plan* proposed an alternative design that revealed extant realities through a spatial and epistemic reclamation. Its maps and stories revealed what official plans concealed, and made visible the relational geographies of work, care, and ecology that sustain the wetlands. In doing so, it re-centred the knowledge and

authority of those who inhabit the margins, and contested both the material and moral hierarchies inscribed in state planning.

Figure 16

Reimagining the “Good City”: An exhibition



Note. Social media poster announcing the schedule of events of the “ghosts, monsters and DREAMS” exhibition in Chennai.

In October 2025, more than a year after the report was released, SECC held a press conference to release a score card on the government’s progress in aligning its commitments on health, environment and local livelihood with community aspirations articulated in the counter-plan. The press release’s title summed up the verdict: “Government fails Ennore: Report card exposes broken promises, legal violations and accelerating industrialisation” (Save Ennore Creek Campaign, 2025). The *People’s Plan*

was never intended as a one-off intervention; it was conceived as a tool to pressure the state to engage constructively with Ennore's issues and to bring its actions in line with subaltern aspirations.

The *People's Plan* and the follow-up actions were acts of subaltern futuring—collective exercises in imagining otherwise from within domination's ruins. In the very act of planning, participants realised that they could imagine; that realisation was itself transformative. The counter-plan opened a space where subaltern voices and sensibilities could speak the present differently, presenting indignity not as fate but as an unfinished condition that can be re-made. Through such practices, imagination becomes political, and planning becomes a mode of resistance: an immanent politics of possibility where futures are enacted, rather than awaited passively; where critique takes the form of creation; and where dominated space is continually re-appropriated as commons.

8.2. Three Case Studies: A Recap

The five cases of erasure featured in Chapter 6 revealed how domination persists through spatial and epistemic practices that silence, moralise, obscure and manage. Yet within those same spaces of erasure lay the seeds of transformation. Acts of enduring and commoning—where fishers continued to fish in forbidden waters, reoccupied erased wetlands, or sustained everyday solidarities—hinted at more than just survival. They embodied latent possibilities of futures not scripted as per dominant order, revealing that domination can never fully contain the life it seeks to order. These fugitive practices form the submerged currents that resurface in the episodes examined next. The following three cases, discussed in Chapter 7, build on these undercurrents to illustrate how resistance acquires transformative force: by opening new ways of imagining the world, re-scaling solidarities, and inserting subaltern voices and knowledges into domains that had long excluded them. A summary of the three cases—*Case 1: A flood of new ideas*, *Case 2: Embodied counter-mapping* and *Case 3: Cooking food to power*—is presented below.

Case 1 revealed how the campaign used the December 2015 Chennai floods as a focusing event and policy window (Birkland, 1998; Kingdon, 2014) to reorient and

rescale the campaign, draw in new solidarities and reclaim the significance of the Ennore wetlands. Central to this case was the music video—Chennai *Poromboke Paadal*—which created fresh opportunities for campaigning and catalysed actions that held TANGEDCO accountable for coal ash pollution.

Case 2 revisited the “fraud map” episode discussed in Chapter 5 to illustrate how policy begets politics. Here, the fisher struggle mobilised the RTI Act, 2005, and the CRZ Notification and staged the *neer satyagraham* (water demonstration) as an embodied act of place-making and a presentation of subaltern geographical knowledge.

Case 3 centred on a women-led campaign that successfully thwarted plans for a mega-port in the Ennore–Pulicat region. This case highlighted a seafood festival co-organised with Pulicat women that linked people, food, and place in a way that honoured each and enlivened the land.

These interventions acted together to do more than just add tactical layers to protest; they marked an epistemic reordering, compelling the state to acknowledge fisher knowledge as legitimate evidence. What had long been dismissed as local complaint now entered the registers of law, culture, and hydrology, disturbing and rearranging the established order of who can know and who may speak.

8.3. Discussion: Transformative Resistance

The cases described involve fishers, Ennore residents, Pulicat women, and other subaltern actors and others, including activists and those that gathered in solidarity with the struggle. These references are not meant to suggest that the subaltern groups are homogenous or uniformly engaged in the struggles. Not every individual identifies with or supports the objectives, methods, or even the necessity of the campaigns. Differences along lines of gender, age, livelihood, and political orientation prevail within and across groups. Even in Kattukuppam—the most active and visible village in the resistance — priorities and opinions diverge sharply.

My interactions with sub-groups revealed general tendencies. Women were often less willing than men to accept concessions such as jobs or cash that did not address root causes of pollution or environmental risk. Younger people were more inclined than

elders to trade fishing for jobs, and more likely to pressure village leadership to prioritise employment over wetlands protection. Those who continued fishing in the wetlands tended to be the most resolute in demanding full eco-restoration.

Fishers aligned with ruling parties often dulled the edge of protest by brokering compromised resolutions and deflecting negative publicity targeting the government. Others, however, used their influence to secure substantial concessions such as permanent jobs in government industries for members of the community. (S. Kumaresan, Personal communication, December 2, 2023).

The environmental justice struggle in Ennore has had to navigate challenges posed by caste differences, political machinations of local leaders, and a culture of patronage and patriarchy. Crucially, hierarchies among subaltern communities in Ennore mean that one sub-group's solution—say, that of male fishers—might come at the cost of a lower-status sub-group like, say, women or *Irular* fishers. Transformative resistance must therefore remain alert to the danger that gains achieved through subaltern insurrections of subjugated knowledges can also produce new oppressions. Such risks can only be mitigated by enabling “epistemic friction of knowledges from below”—i.e., through productive confrontation between marginalized perspectives that disrupt exclusionary subaltern claims—and by creating spaces for negotiation between knowledges to ensure that marginalised knowledges “do not remain lost and unattended, but are allowed to exert friction” (Medina, 2011, p. 21).

I present this context to frame the discussion on transformative resistance. Power imbalances and internal politics must be negotiated at every stage of struggle. While these negotiations are not my central subject, I flag them to show that the struggle for wetlands not only confronts the state and capital but must also navigate complex local dynamics. This dual front—of confrontation and negotiation—underscores both the monumental significance and formidable challenges of subaltern resistance.

8.3.1. Theme 1: Enduring

For more than five decades, Ennore's fishers have endured the impacts of intensifying industrial encroachments. The first documented collective resistance by fishers dates to the early 1970s (Government of Tamil Nadu, 1973a, 1973b, 1975), marking the

beginning of a continuing struggle to reclaim and restore their wetlands. Over the years, industrialisation intensified and degradation worsened, but fishers endured: alienated from land, dispossessed of livelihoods, and exposed to pollution of air, water, and sediment.

Cognitive liberation marks the pivotal shift when subjugated groups begin to see their oppression as unjust and alterable—a turning point crucial for transformative resistance (McAdam, 1999). As Chandra (2015) notes more broadly about subaltern resisters, for more than 50 years Ennore’s fishers have endured worsening environmental, health and economic conditions, yet have continued to act “with sufficient intention and purpose to negotiate power relations from below. . .[and] rework them in a more favourable or emancipatory direction” (Chandra, 2015, p. 565).

Chandra (2015) distinguishes between a “failure of resistance” and a “failure to resist” (p. 565). At no point did the fishers fail to resist or defend their territory, even as conditions deteriorated. For some, such as those who secured employment, economic circumstances may have improved. But even they suffered from living in polluted, hazard-prone landscapes.

Fishing itself remained both livelihood and daily act of resistance: an assertion of territory through doing and being. Even as they endured repeated setbacks, fishers built alliances with activists and, through them, with artists, journalists, bureaucrats, youth and scientists. Their endurance was not passive but a ‘militant enduring’—marked by a collective commitment to remain outspoken, visible, and assertive in the face of erasure. They staged small actions and major protests, wrote letters, filed cases, and launched innovative campaigns with arts, music, and food. They and their allies organised toxic tours that yielded little immediate campaign dividends but left indelible impressions of what fishers endured daily, converting many visitors into long-term allies.

Fishers, fishing and wetlands have ‘militantly endured’ and thwarted the state’s aggressive acts of erasure. The wetlands’ endurance—their capacity to “give” despite declining health—has been central to fishers’ survival. S. Kumaresan underscored this with a striking analogy:

You may invoke god's name and pray for a day's income, for Rs. 500 or Rs. 1,000 to meet the day's expenses. Do you think god will give? But when I approach the river and set my nets, saying "I've come here placing my full faith in you. You must provide for me today." And the river gives. (Personal communication, December 2, 2023)

Even over the last 30 years, when erasure was most aggressive, fishers earned enough—though with great difficulty—to secure family futures:

Just prawns. I don't set nets for fish. Just through my earnings from the river, we have paid for the weddings of seven of us siblings and built five houses. (P. Mahendran, personal communication, February 4, 2024)

Others such as J. Prasanth, a young activist who first learnt of Ennore through *Chennai Poromboke Paadal*, found inspiration in the resilience of the wetlands:

During my field visit, I witnessed a massive congregation of birds foraging in a polluted pond near the ash pond. That's when I realised that no matter how bad it gets, nature manages to take care of itself and adapt according to the changing context. (J. Prasanth, personal communication, February 18, 2024)

Fishers draw their power to endure from the resilience of the wetlands they defend. Their endurance is not abstract but a direct contestation of the state's project to dispossess them and render the wetlands devoid of meaning or incapable as means of resistance. The state's portrayal of the wetlands as lifeless *tabula rasa* is not a mere abstraction; it is materialised through intentional acts to shape 'lifeless' space into capital-friendly forms, bleeding the land of its resistive life-force. The intertwined endurance of the wetlands and fishers is thus a refusal to submit to the total domination sought by the state's spatial vision.

8.3.2. Themes 2 & 3: Commoning and Opening Up

Themes 2 and 3—commoning and opening up (insurgent occupation)—are intertwined, mutually reinforcing, and often occur simultaneously. Commoning, including through rightful trespassing into physical and abstract spaces, defies enclosures. Opening up builds on such defiance to increase recognition and visibility of subaltern actors, and

creates spaces for them to occupy and influence decision-making. Both are grounded in the push-back of the cognitively liberated subaltern against the governmentality of abstract spatial orders. Discussing them together enables a fuller account of how insurgent acts not only resist domination (through commoning) but also actively cultivate spaces (through opening up) for new actors, forms of life and politics.

The Ennore struggle unfolded in two phases. The first, spanning the 1970s to the early 2010s, saw fishers mobilising alone—often as a single village, sometimes as a few inland fisher villages together. They responded to manifest and imminent threats through diverse acts of resistance. The state contained these protests to a hyperlocal scale, resolving them informally through threats, insincere job offers or petty compensations. The second and ongoing phase began in 2013 when fishers invited city-based activists into the struggle, catalysing a growing network of solidarity. A turning point came in 2015, when a powerful non-human actor, the Northeast monsoon, joined the fray, dramatically altering the struggle's scale.

Across both phases, fishers asserted claims to the *poromboke* as a territorial commons through everyday acts of commoning: fishing, or protesting the degradation, diversion and enclosure of commons. Of the two other rivers flowing through Chennai, the Cooum has no fishers, and the Adyar has a small, struggling handful near the estuary. As urban rivers, they have succumbed to the pressures of elite aesthetics, bourgeois environmentalism and riverfront development (Coelho & Raman, 2010; Saravanan & Jayaraman, 2011). The Ennore wetlands, Kosasthalai river's estuary, remains a working-class river with labouring fishers commoning it everyday despite adverse conditions:

When I return from fishing, my body sweats; it smells so foul that nobody can stand near me. . . I must make a living. We have been forced into such an environment. We never get used to it. All kinds of water comes—silver, yellowish. When that happens, we emerge from the river like people in fancy dress competitions. Our bodies became like that.

(R.L. Madanagopal, personal communication, February 22, 2024).

This is their lived experience—an endurance born of necessity, where there is no option to leave or modify the experience, even when it is unpleasant. Yet Ennore's enduring

fisheries give it the status of a working river and allows fishers to push-back against the proletarianising pressures generated by wetland degradation.

The launch of the second phase marked a different kind of commoning—one that ruptured both material and conceptual enclosures and barriers. The activists invited by fishers helped mobilise a broad solidarity network. The expanded campaign reframed the wetlands—presented until recently as a fishing ground central to Ennore's economy—as a shared ecological commons, vital to the city and of interest to its residents. The struggle grew beyond livelihood concerns to encompass state and industrial abuse of wetlands and the consequent endangerment of the metropolis itself.

This expansion pierced state-imposed enclosures that had constrained the scale and membership of the struggle. Fishers' ways of knowing the wetlands began to enter discursive arenas that had previously excluded them. Activist comrades helped them navigate legal knowledge and advocacy, even as activists themselves unlearned dominant, place-erasing spatial narratives they had internalised. Rather than remain confined within caste-based village administration—a structure that often reinforces the dominant spatial order—fishers sought new alliances and reconfigured their political organisation in more autonomous forms of struggle.

In turn, activists gained water- and wetland-literacy and a deeper understanding of subaltern politics. I recall one discussion after the disastrous oil spill in December 2023 (Shekhar, 2023). Fishers who had fiercely protested the pollution demanded that the polluter hire them for the cleanup. They negotiated a deal: workers would be paid nearly three times the daily minimum wage, with villages sending teams on rotation to manually remove the oil (personal communication, December 12-13, 2025).

Some younger activists were disappointed, viewing this as an unreasonable compromise. They felt fishers should have insisted on compensation, full remediation, or at least protective gear and training. Why, they asked, would anyone willingly expose themselves to the very poison they had just condemned? A few even questioned whether the fishers were motivated more by jobs than environmental concerns (personal communication, December 14-15, 2023).

Kumaresan's response to my plea insisting on protective gear was both a lesson in politics and a sobering reminder of everyday hardship—a quiet rebuke to those who had the luxury to judge.

You think it is only the oil that makes the water repulsive? Who will give me protective clothing after the oil is gone? Everyday we wade through, dive into and spend six to eight hours in the river that is more sewage than water. All the sewers from the city drain into our river. We are bathed in that stuff. It gets into our eyes, nose, mouth. The river sediment is sewage sludge. We dive in and set our nets in that. This is the normal we'll return to after the visible oil is gone.

(S. Kumaresan, personal communication, December 12, 2023)

Fishing had already been impossible for a week due to heavy rains. Hearths had gone cold. Then the oil spill shut down the prospect of fishing for months. From long experience, fishers knew that compensation would be delayed and meagre. The immediate priority was to ensure that the remediation budget fed their villages.

As for toxicity risks, fishers reminded us: even on the best of days, fishing in Ennore is a toxic, filthy encounter. Under the circumstances, survival meant navigating harm, not avoiding it. This held transformative lessons for me as an activist: first, that there is no politics of purity, and that the moral high ground always comes at a cost; second, that the promise of a better, ideal future cannot be an enemy of the present, for in subaltern life, it is the oppressive present that is made invisible by dominant ignorance, and it is that which demands redress even as futures are imagined; and third, that the ethics of solidarity demand humility and patience. To practise humble solidarity is to recognise that being “in solidarity” does not mean being the same. Privilege can obscure subaltern rationalities. One must neither insist incessantly nor withdraw blindly but engage with the epistemic friction that arises between different ways of knowing and surviving. The true meaning of “staying with the trouble” (Haraway, 2016) lies in this dialogue: allowing dissonance to reveal ignored knowledges and fisher political reasoning. What appeared as risk or compromise from the outside was, in fact, a grounded calculus born of experience. Protection from toxins was not the only dimension of safety to consider; safety itself was a negotiation between different risks—the risk of exposure, familiar and endured daily, and the risk of hunger, immediate and absolute. Practising safe solidarity

did not mean withholding one's views but expressing them without insisting incessantly—a balance possible only within relationships of trust forged through the practice of deep and slow solidarity.⁷⁵

As first glimpsed in Chapter 6, moments of endurance within domination often contain the seeds of transformation. The 2023 clean-up revealed this with clarity: fishers' decision to undertake the task was not resignation but a collective negotiation with harm. Their endurance was communal, not individual—anchored in care for the livelihood of hundreds rather than the profit of a few. In this shared act lay a quiet reclamation of agency, where dominated space was temporarily appropriated and repurposed to sustain life. Seen through this lens, transformation is neither an abstract ideal nor a distant promise but an immanent process—one that unfolds in the everyday labours of those who, by enduring together, already live the world otherwise. It is from such lived acts of endurance and commoning that the capacity to imagine otherwise arises—revealing that at least some elements of a just and sustainable world, built on cooperation and shared risk and benefit, are already present in the here and now. Elements of the world that is to be imagined are here already.

8.3.2.1. *Power to Imagine.*

Through their struggle, the fishers arrived at three transformative realisations. First, they understood the conditions of their own subordination; second, they came to appreciate the power of scalar politics, enabled through alliances. The 2015 floods allowed them to present the city's ecological crisis as driven by industrial encroachment on wetlands. By framing local encroachments as the cause of a city-wide disaster, fishers recast a local crisis as a metropolitan emergency. And thirdly and finally, they discovered the dynamism of possibility—the sense that new futures can be forged and dominant limits breached through collective action. Evidence-rich letters helped reverse illegal landfilling; the floods enabled them to unsettle the belief that 'industrialisation is good' by asserting instead that 'wetlands are better.' These tactics expanded their confidence

⁷⁵ Safe solidarity here is read as a part of humble solidarity, where humility and a restrained, reflexive advocacy shields subaltern actors and solidarity workers from harm. Later on in this thesis, safe solidarity is flagged as a principle of solidarity activism and ethnography in its own right, left open for future work.

and extended the horizon of what they thought possible. This section focuses on the third.

Acts of imagination arise not from escape but from inhabiting the present differently. As Lefebvre (1991) reminds us, within every dominated space lie the seeds of its appropriation—moments when lived practices reclaim use value and relationality from abstraction. When fishers and activists sing, counter-plan, or stage embodied cartographies, they do more than resist dispossession; they re-energise the present. Their attention to the here and now should not be mistaken for a lack of vision, narrowly defined as teleological and progressive. Rather, it marks a different temporality of transformation—one where the work of imagination begins inside domination itself.

Seen through this lens, the power to imagine is inseparable from the labour of appropriation. Each act of reclaiming—whether a *People's Plan* or a seafood festival—opens cracks in capitalist spatial orders and fills them with collective purpose. These gestures re-animate spaces drained by technocratic planning and assert that the future is not elsewhere or deferred but immanent in the present. The just and sustainable world to be imagined already flickers within these everyday appropriations—cooperation, shared risk, and mutual care made visible through struggle.

The dynamism of possibility emerges from the process of opening up and occupying spaces for envisioning futures normally reserved for elites. The post-floods discursive struggle emboldened subaltern actors conditioned to dream small to realise that larger dreams were possible.

These expanded possibilities reshaped the political terrain. Where fisher protests once drew only low-level bureaucrats, mobilisations now compelled responses from powerful political figures. Actor-turned politician Kamal Haasan visited Ennore before the *neer satyagraham* (water demonstration); leader of the opposition in the state assembly M.K. Stalin tweeted a promise to cancel the port expansion in response to the campaign by Pulicat women, fishers and city-based activists. Courts and the executive issued orders vindicating fisher concerns, and directing the wetland remediation.

The People's Planning process likewise transformed marginalised subjects into planners and dreamers; the planning space was turned from a fortress of experts to a

commoners' playing field. This not only enhanced the status of the planners-from-below but also opened a space where banished and subjugated memories and histories could inform visions of the future. In contrast to the state's technocratic, ahistoric and ambitionless eco-restoration plan (Government of Tamil Nadu, 2020a), the *People's Plan* drew on history, law and realistic aspirations. It also created a political stage for women, children, artists and playwrights to express themselves through story, artwork, performance and film.

8.3.2.2. Lawfare and Layfare.

The second phase of the struggle drew strength from a combination of lawfare and layfare. "Lawfare" refers to the use of "legal means for political and economic ends" (Comaroff & Comaroff, 2009, pp., p. 26-27) and the choice of legal fora (courts of law, regulatory agencies) and legally sanctioned methods (evidence-filled letters, lawsuits). Lawfare can be used for oppressive politics and to further the economics of accumulation or for emancipatory politics.⁷⁶

Layfare, by contrast, refers to subaltern use of lawful, unlawful and informal tactics in public arenas to contest dominant narratives, assert agency, and pressure the state by mobilising public opinion. It may involve media or direct-contact events, spectacular actions or timely interventions that draw power from embodied performance, art and affect. Unlike the first phase, where tactics targeted the state directly, layfare appeals to the conscience of a secondary target—the public. While lawfare appeals to institutional authority and offers law as a potent commoning tool, layfare mobilises moral authority to bear on institutions through public pressure.

Together, lawfare and layfare complemented one another. They breached discursive and institutional barriers and asserted fisher participation in decision-making. For example, in exposing the 1997 "fraud map," SECC used the RTI Act to unearth hidden

⁷⁶ Lawfare -- understood as "legalised contestations over political and social change" (Gloppen, 2018, p. 1) -- is not a tactic used exclusively by social movements for emancipatory objectives. States and corporations also (ab)use law to curb rights; SLAPPs (Strategic Lawsuits Against Public Participation) are one example of such practices. In this thesis, lawfare refers specifically to subaltern uses of law in pursuit of emancipatory goals. For a fuller discussion of lawfare as an analytical framework, see Gloppen, S. (2018). *Conceptualizing lawfare: A typology & theoretical framework*. Bergen: Centre on Law and Social Transformation.

information. A year-long RTI campaign across multiple departments revealed plans to divert 6,500 acres of wetlands for industry. The RTI law became a legal commons, yielding evidence for both lawsuits (lawfare) and public-facing actions (Save Ennore Creek Campaign, 2017b). The press conference releasing the information and the *neer satyagraham* (water demonstration) exposing the fraud map's false portrayal of river as TIDCO Petrochem park were aimed at building public opinion and underscoring the government's role in exacerbating regional flood risk. Meanwhile a case filed by a fisherman in the NGT took the politics into the courtroom. The information obtained through the commoning power of the RTI Act was critical to this and other campaigns undertaken by the fishers and SECC.

In this case, even before the government's fraud map was exposed in court, the fishers demonstrated the hollowness of the map's portrayal of water as land by standing waist-deep in the river and declaring "This is River, not Land" and "River is Life." They sought no police permission for the protest underscoring their understanding that water is their territory. In staging the *neer satyagraham* before eager television cameras, the fishers asserted their relationship and oneness with water and assumed the role of honest experts, countering the fraud map through embodied counter-mapping and deep place-based knowledge. The *neer satyagraham*, as embodied counter-mapping, allowed fishers to gain greater recognition; the slogan "river is life" asserted their way of knowing the river not as inanimate space but as a living entity and provider of life to humans and non-humans. This is layfare—the use of lay, situated knowledges in public arenas to counter the obscurantism of legal and technical discourses—a form of people's legal politics that corrects and complements lawfare. Though staged without police permission and technically unlawful, the *neer satyagraham* mobilised an alternative legal consciousness grounded in lived knowledge and ethical claims to territory that challenge the state's definitions of space, legitimacy and rights.

The Ennore campaign used this blend of evidentiary lawfare and performative layfare to gain further cultural traction through the release of Chennai *Poromboke* Paadal, a music video that linked the degraded *poromboke* commons to capitalist modes of enclosure and dispossession. It demonstrated how a struggle that militantly endures can opportunistically latch on to powerful forces unleashed by non-human nature—in this

case, the Northeast monsoon that brought the 2015 floods. The monsoon rains in 2015 and 2023 acted not simply as a force of nature but as a commoning force—washing over industrial defences and connecting divided geographies. In doing so, the flood defied enclosure, and reasserted the interconnectedness of wetlands and the porousness of industrial claims to land. Water remembers, and when it returns to its old haunts, it dismantles enclosures that obstruct its flow. Its power lies less in force and fury than in insistence, persistence, and the certainty of return—qualities mirrored in the amphibious communities that endure and contest erasure.

The floods offered fishers a way to pierce the state's veil of benevolent ignorance, through which it had long justified the industrialisation of wetlands as progress and societal well-being through electrification. Once water reasserted its pathways, and fishers seized the narrative, the state's ignorance and its cloak of benevolence were exposed. The floods resurrected the hydrology ignored by planners and regulators, revealing the inevitable consequences of enclosure.

The 2015 floods which caused US\$ 3 billion in economic losses (National Institute of Disaster Management, 2021) opened up spaces for fishers to occupy, to present their knowledge and be heard, and to imagine futures that they never dared to imagine before. The fishers linked the floods to the abuse of wetland *porombokes* through their open letter to Chennai residents (Jayaraman, 2016a). The music video made a powerful case for the revalorisation of the *poromboke* and the wetlands, even as it offered a post-capitalist imaginary in which the commons, rather than private property, are valued. Its lyrics emphasised the centrality of the *poromboke* not just for individuals but for all life, and appealed to people to care for it. Drawing from fisher ontology, the video presented the commons as a socio-ecological oneness that defied the nature-society binary

Poromboke is not for you, nor for me It is for the community, it is for the earth. . .
. . . *Poromboke* is in your care, it is in mine

It is our common responsibility towards nature, towards the earth

(Vettiver Collective, 2017, 0.23)

By circulating subjugated fisher voices into the cultural mainstream, it unsettled the ignorance regimes that had long normalised dispossession. The consensus of

convenience that allowed regulators and industries to ignore violations was disrupted once fisher claims resonated as civic critique, sung and shared by publics far beyond Ennore. Voiced through the authority of art, this critique cast the commons as a shared moral responsibility and exposed the actions of government and industry as reckless.

The video's popularity and the attention it brought to the region and its fishers resulted in greater recognition of the fishers as knowers. Such attention did not go unnoticed even by the judiciary. Consider these lines from a judgement by Justice G.R.

Swaminathan of the Madras High Court in an unrelated case concerning diversion of *poromboke* lands:

I am conscious that every judicial verdict must be anchored only in law and logic. But a judge must also exhibit awareness of what is going on. His inner antenna should catch the signals. To create such an ambience, before dictating this Judgment, I listened to T.M. Krishna's "poramboke padal". I recalled the words of Nithyanand Jeyaraman (*sic*) that while encroachment of water bodies may be regularised by law by issuing pattas, "Nature" will not take note of the same.

(Swaminathan, 2021)

This case allowed fishers and activists to challenge the conventional urban planning orthodoxy—the belief that in an urban area "Every bit of land is urbanisable"

[Bureaucrat 1, Personal communication, February 12, 2024].

Another act of layfare was the Pulicat women's seafood festival against the proposed mega-port, linking cuisine, territory and resistance. Here, women asserted themselves not only as community leaders but as expert guides and cultural custodians. By naming the fishing grounds that would be destroyed by the proposed port, they publicly mapped the ocean floor in ways that defied the land-centric logic of capitalist planning documents. By naming the *seru* (muddy seabed areas) fishing grounds, they signalled their intimacy with and belonging to place, marking off their territory. By reviving the taste, memory, and sociality of place, the seafood festival generated cross-class and urban-rural solidarities, strategically using appetite to convert consumers into allies. This performative politics reanimated a landscape dismissed as barren and reframed it as a site of meaning, memory, and livelihood.

In each of these three cases, fisher resistance allowed fishers to be enlivened by and to keep alive, the life-force of the wetlands, thereby retaining some control over their means of production and persisting as fishers rather than selling their labour for wages. Using lawfare for legal teeth and layfare to gain cultural voice, the disturbed capitalism, resisted enclosures and thwarted proletarianisation of the fishers. Between them, they defeated plans to enclose the seas and wetlands, and won a court order for the notification and remediation of the unencroached wetlands contained within the government-approved 1996 CRZ map.

8.3.3. Re-energising and Material Gains

A struggle's success is neither a necessary nor sufficient criterion for judging its transformative tendencies. Resistance, especially through lawfare, may yield court victories and material gains for subaltern communities. Yet for such gains to be transformative, they must align with the criteria outlined in the transformative resistance framework (see Table 4, Section 4.3.3), including shifts in worldviews, ways of knowing and ways of conceiving space.

The theme of *re-energising* draws attention to both material achievements and conceptual breakthroughs of struggle—particularly those outcomes that dismantle the nature-society divide. Re-energising, as noted earlier, is both the intent and, where successful, the outcome of subaltern EJ struggles. The Ennore fishers' struggle is rich in intent to re-energise and has recorded substantial gains on the ground and on paper. However, many of these gains have involved blocking harm rather than actively resuscitating ailing socio-ecological systems.

For instance, when KPL was forced to remove illegally dumped sand from a wetland, the damage was partially repaired and life returned. But conditions were no better than before. Similarly, the women- and fisher-led resistance to the proposed mega port in Pulicat prevented the enclosure and destruction of nearly 6000 acres of sea, dunes and wetlands. This preserved land-uses that served the base of the social/ecological pyramid and halted their conversion into zones of capital accumulation. Yet while the status quo was protected, the degraded conditions created by decades of dispossession remained unaddressed. These victories, then, amounted less to re-

energising than to holding ground—halting further harm while deferring the deeper work of restoration.

The campaign to restore the 1996 CRZ map also ended successfully, with the court directing the state to notify and remediate the full extent of unencroached wetlands (Mahendran P. & Ors v. Union of India, 2021). But much damage had already occurred during the two decades that the map remained hidden. A new struggle is now underway to force compliance with the court’s order. Once again, the gains mitigate further de-energising by retarding continued toxification and loss. Though it does not amount to re-energising, this is not inconsequential: such victories build local capacity to endure, preserve the socio-ecological possibility of future re-energising, and nurture the imagination of alternatives.

The power of subaltern actors to imagine today what was deemed impossible yesterday has been on display throughout these campaigns. The Pulicat women’s campaign and the *Chennai Poromboke Paadal* invite us to envision futures where the *poromboke*—with its communal, place-based value—becomes the basis for spatial planning, replacing the logic of private property. The fight against the fraud map advanced an alternative ontology that collapses the society-nature binary into a “River is Life” worldview. The *People’s Plan* articulated a vision to re-energise territory by weaving together “economy (jobs and livelihoods), health, ecology, and culture embedded in the local lands and waters” (Jayaraman et al., 2024, p. 3).

These visions, however, remain provisional. The full remediation ordered by the court, and the expansive re-energising outlined in the *People’s Plan*, lie in the future and hinge on the outcomes of continued struggle. Still, what has already been achieved—in preserving space, asserting knowledge, and shaping futures—lays essential groundwork for transformation.

8.4. Conclusion

The thematic evaluation of these cases demonstrates that for a struggle to prevail, it must first endure. Militant enduring, as discussed above, is crucial for long-drawn struggles. It is made possible by the realisation of one’s subjugation and of the

possibilities of emancipation. Militant enduring and militant imagining, then, bookend the process of transformative resistance and re-assertion of territory, held together by insurgent acts of legal, extra-legal and even unlawful commoning and occupation. When such acts yield salutary outcomes, they strengthen both the will to endure and the capacity of the subaltern to imagine.

These cases reveal the transformative power of enduring, commoning, opening-up and re-energising. Yet, they also surface significant challenges and hard truths about the nature of transformation from below. When fisher struggles seek the support of political parties, they accept the risk of co-optation and the dampening of radical openings. Structural asymmetries persist both within the larger political system and within subaltern groups. Commoning, as subaltern resistance, must therefore continually renew itself not only against enclosures, state and societal violence, and market pressures, but also against its own internal exclusions.

A cameo from Ennore in 2023 illustrates how friction, asymmetry, and subaltern politics play out in practice. Fishers had documented the infestation of invasive mussels in the wetlands (Kattukuppam Fisher Panchayat & Save Ennore Creek Campaign, 2022). Their campaign, using a mix of lawfare and layfare tactics, forced the government to act. However, the government lacked a bathymetric baseline—the original depth profile of the wetlands—to guide its actions. They had to rely on the fishers, who offered to develop a bathymetric profile for the infested sections of the river drawing on their collective memory. Saravanan and I worked with the fishers in a focus group session to convey the profile to paper. For one section, elders recalled an average depth of 3 feet and a maximum depth of 6 feet. One young fisher proposed deepening the area—excluding the *paadu* where nets are staked—to 10 or 11 feet reasoning that siltation would soon reduce it.

I then asked if such deepening would harm the tribal *Irular* women who gather prawns by wading, feeling for and hand-picking them from the riverbed. The young man replied “The river is large. They will go elsewhere.” At this point, another seasoned fisher, Kumaresan, intervened: “The river belongs to all of us. We cannot do something that will harm [the *Irular* women’s] livelihood. That would make us no different from TANGEDCO or Kamarajar Port” (Personal communication, December 2022).

The profile submitted eventually accommodated the interests of the *Irular* women. But it could have just as easily not, and the fishers' hard-won gains could easily have created new oppressions. What saved the moment was the space for epistemic friction where knowledges from below rubbed against those from above them. Given their marginalised status, *Irular* women might never have protested the young man's proposal themselves. Friction was generated on their behalf only because Kumaresan and I intervened. Better still would have been if someone had enabled the women to speak for themselves.⁷⁷

Seen from the margins, sustainability transformation is not a telos or a destination. It is a contested, relational, and unending process. It unfolds through friction—between knowledges, livelihoods and different imaginaries of justice and futures (Medina, 2011). As the cameo shows, even hard-won victories can produce new exclusions. The challenge is not merely to endure and imagine otherwise, but to remain alive to the risk that resistance itself can reproduce the very hierarchies it seeks to undo. This demands mechanisms to register dissent from below even before it becomes audible, and solidarities capacious enough to hold contradiction.

In speaking for the *Irular* women, Kumaresan and I momentarily made room for such friction—not to resolve it, but to let it be felt and responded to fairly, justly and sustainably. That space of discomfort is not a threat to transformation; it is its very condition. For those who are marginalised by mainstream society, transformation cannot mean mere inclusion in someone else's vision. It must mean the possibility of realising their own vision of the world, and securing a place for it in a world where many worlds exist (Escobar, 2016).

These cases demonstrate that transformation from below is sustained by the capacity to endure, imagine, and remain open to friction. Militant commoning and solidarity enable subaltern struggles to hold territory and possibility in the present, even as they

⁷⁷ SECC's attempts to build a relationship with *Irular* fisherwomen began in 2016 when activists alerted them to a statutory public hearing for Kamarajar Port's expansion proposal. After much hesitation, some community members attended the public hearing, but refused to speak. Given the extreme caste marginality of the community, its members prefer to remain invisible and silent to protect themselves. The process of establishing a relationship of trust has been slow, explaining why they were not part of the focus group to develop the bathymetric profile despite their deep knowledge of the river.

confront the risk of reproducing new exclusions. Transformation, then, lies not in arriving at a just future, but in continually cultivating the conditions—ethical, epistemic, and political—that keep multiple worlds alive and visible in the present.

Chapter 9

Conclusion

Three decades of consensus-building international negotiations on climate, desertification and sustainable development have failed to bend the emissions curve, stem desertification, usher in sustainability, or mitigate social inequality (Centeno, 2020; Hulme, 2011; Stoddard et al., 2021). It is now widely acknowledged that these crises cannot be addressed within the “limited paradigm of economic growth” (Intergovernmental Science-policy Platform on Biodiversity and Ecosystem Services, 2019, p. 19). Nevertheless, the world continues to pretend that experts, governments and big businesses will lead the transformation to sustainability through techno-financial and governance innovations that leave the capitalist status quo undisturbed. Much academic scholarship on sustainability reflects these same biases: generally, it takes capitalism and economic growth as a given, centres innovation to the exclusion of disruption and unmaking, and neglects subaltern EJ struggles as forces of sustainability transformation.

This thesis addressed that knowledge gap by studying a long-running subaltern fisher struggle to save the Ennore wetlands in Chennai, Tamil Nadu, India, as a case of transformative resistance. Given the caste and class marginality of Ennore’s dominant fisher community—the Pattinavar—the study explored how subaltern actors, and their resistance manage to emerge from the margins to challenge hegemonic processes and contribute to transformative change. It also reframed sustainability transformations to present what they look like when seen from the margins.

Methodologically, the case study used a qualitative ethnographic approach, drawing on autoethnographic accounts from my decade-long engagement with the Ennore struggle as a solidarity worker, field notes, official and non-governmental documents, and in-depth interviews with fishers, bureaucrats, activists, lawyers and academics. Because subjugation and transformation of subaltern life-worlds—a process central to capitalist accumulation—require strategies that mobilise different kinds of dominant ignorance, I adopted an ignorance-based analytical framework, namely, Medina’s (2011) Epistemology of Resistance, to reveal the making and unmaking of invisibility and

subordination. The transformative aspects of the fisher struggle were analysed through a Political Ecology Framework of Transformative Resistance developed specifically for this study.

Drawing on the conceptual groundwork laid in Chapter 4, the thesis used these frameworks to address two interrelated research questions: (1) How do subaltern struggles emerge from the margins to challenge hegemonic processes that deny recognition to their worlds and ways of knowing? and (2) How do subaltern struggles for environmental justice contribute to transformative change for sustainability—or, put differently, what does sustainability transformation look like when seen from the perspective of subaltern struggles?

The following sections sequentially discuss and reflect on the significance of the study's findings, methodological approach and analytical framework. They return explicitly to the research questions by summarising and reflecting upon the findings of Chapters 6, 7 and 8—each dealing with surviving erasure, resisting erasure, and transformation respectively—and conclude with a dedicated discussion of their theoretical contributions and limitations.

9.1. Findings: Erasure and its Undoing

Both during the British colonial era and the post-independence period, Ennore was colonised and its fishers dispossessed through the enclosure and degradation of coastal and wetland commons. Rather than through dramatic acts of overt violence, the dispossession was carried out behind a façade of rational planning, progress, legality and civility suggesting a reliance on knowledge, laws and science. A different picture emerges when ignorance rather than knowledge is taken as the basis of the state's spatial planning, and planning is understood as a tool of control, subjugation and accumulation (Lefebvre, 1991). In doing so, the analysis directly addresses the first research question by revealing how systems of domination draw on orchestrated ignorance, rather than mere error or lack of information, to justify and normalise the dispossession of subaltern worlds.

Sans façade, this mode of dispossession, which I term 'civil' dispossession, reveals itself as a brutal process effected through an ignorance-centred application of law,

policy and planning. It is built on fraud, insincere promises, judicial double-standards, consensuses of convenience and empty invocations of faith in science and the rule of law. ‘Civil’ dispossession aids accumulation by sucking value from the bottom of the socio-ecological pyramid. This form of accumulation is particularly vicious and nihilistic, harming the most vulnerable human communities by attacking their sources of food, livelihood, fuel, construction material, and medicine, and degrading the most productive trophic levels that sustain planetary life. The trickle-down economic myth justifies this plunder, while actively ignoring the lived reality at the base of the socio-ecological pyramid—where subaltern and non-human life-worlds are emptied out of meaning, value, and vitality. It clarifies that such acts of dispossession are not aberrations but constitutive features of a ‘civil’ mode of rule. It also provides the foundation for the responses to the research questions explored in Chapters 7 and 8. Read through Medina’s *Epistemology of Resistance*, the concept of ‘civil’ dispossession illuminates how knowledge and ignorance are co-ordinated. Expert reports, legal documents and planning schemes perform rationality and fairness even as strategically cultivated non-knowing about subaltern life-worlds, caste, gender and ecological relations enables the erasure of people, places and inter-relationships. These reports, documents and schemes present the knowledge they contain as complete and total, effectively masking the quiet work done by that which is not known, not knowable, intentionally ignored or kept hidden. Only a system that is reflexive, aware, and alive to its own ignorances can aspire to cultivate the kind of dynamic rationality required to engage with epistemic friction and be alive to sensing, acknowledging and repairing injustice.

The findings also reveal the ignorance-based strategies used by the state to dispossess human and non-human users of in-between, littoral spaces like wetlands. These strategies evolved as the nature of the government changed from colonial to developmentalist to neoliberal. Of particular interest are the ignorance strategies—including fraud, deceit, false and insincere promises (promissory politics), consensuses of convenience, and impunitive and benevolent ignorance—that enabled

dispossession as the state transitioned from its Nehruvian⁷⁸ developmentalist phase to its neoliberal avatar. Even the former period witnessed significant dispossession that disproportionately affected the marginalised, but the government's discourse of nation-building and serving the greater common good had more purchase then than it has in the neoliberal era (Levien, 2013). That credibility was aided by the state delivering on some promises of secure public sector jobs and of investing in infrastructures that served people, rather than only on infrastructures of global commerce.

Nevertheless, the state's shifting strategies through different eras to dispossess Ennore's fishers of their coastal commons, and the counter-strategies deployed by the latter (described in the next section), offer the ingredients for the development of a 'littoral political ecology.' Such a framework could reveal the distinctive politics arising from the imposition of landist values on "littoral societ(ies)" and more-than-human dimensions of power that such imposition engenders (Pearson, 2006, p. 353).

A littoral political ecology would attend to the life-worlds of the littoral characterised by *kazhi* or fluidity. These spaces assume greater salience as a warming atmosphere, changing seas and growing maritime commerce impose new pressures and vulnerabilities. A littoral political ecology also highlights amphibious activism, where littoral communities ally with more-than-human forces like monsoonal rains, cyclones, and floods to resist erasure and reimagine more just and sustainable futures.

While not developed in detail here, flagging the idea of a littoral political ecology points to the need for future work that extends political ecology's largely land-centric vocabulary into amphibious and fluid terrains. Its significance lies in opening a conceptual space attentive not only to the politics of coasts, wetlands, and estuaries, but also to other in-between geographies — from urban informality, and the land-air interface to queer spaces — where fluidity unsettles dominant binaries and produces distinctive forms of resistance.

⁷⁸ Nehruvian is a reference to the development policies of independent India's first prime minister Jawaharlal Nehru who served from 1947 to 1964. Emerging from famine and poverty as an independent nation, Nehru's emphasis was on national self-sufficiency through import substitution and industrial capacity enhancement, infrastructure building and agricultural modernisation.

‘Civil’ dispossession builds on existing theories of dispossession such as Marx’s primitive accumulation and Harvey’s accumulation by dispossession (Harvey, 2003), but goes beyond their economic foci. While Harvey’s theory emphasises how capitalist accumulation proceeds through expropriation of assets rather than the exploitation of living labour (Levien, 2013), ‘civil’ dispossession refers to a distinct form of dispossession targeting the commons and human and non-human communities of commoners. Since all people are, in effect, commoners—benefiting either directly, as fishers do, or indirectly from the goods and services such as flood mitigation that the commons provide—‘civil’ dispossession ultimately harms even those who remain unaware of their own victimisation.

While the socio-economic outcome of such dispossession—i.e. proletarianisation (of fishers, in this case)—resembles primitive accumulation, the means differ and its consequences are economic and ecological as well. Its most insidious aspect lies in its mask: cloaked in the language of civility, legality, knowledge-based planning, and liberal norms, ‘civil’ dispossession mobilises multiple forms of ignorance to conceal violence, fraud, and deceit beneath a rhetoric of fairness, justice, and public interest.

This ignorance-centred analysis of dispossession adds to the growing body of concepts in ignorance studies by identifying new forms of ignorance such as promissory politics, and benevolent and impunitive ignorance. Taken together, ‘civil’ dispossession as a framework and the body of ignorance concepts as a toolkit can be extended to provide fresh insights into the study of the dispossessive tendencies of climate ‘solutions’, and imminent and ongoing marine dispossession (Wilson, 2021) in the name of Blue Economy (Campero et al., 2023). They unmask the uncivil and illiberal nature of false solutions. By highlighting ignorance, such analyses can help unearth and recirculate ignored knowledges to assert ecological rights and customary and traditional rights of communities to the commons. However, this account of ‘civil’ dispossession is necessarily partial: it is grounded in a single, though deeply studied, case and focuses on one set of institutional and geographical configurations. Its wider value lies not in offering a universal model but in providing a conceptual lens that can be tested, refined or challenged in other contexts of urbanisation, blue economy expansion and climate governance.

9.2. Resisting Erasure

The findings of Chapter 7 speak directly to the first research question. From the first instance of oil pollution in the early 1970s, Ennore fishers have made representations to the government as individual villages—actions that reflected both a conscious awareness of having been wronged and an understanding of their rights. Over the decades, their protests intensified as the insults to the wetlands grew more frequent and severe. Yet, taking advantage of the fishers' marginalised status and insularity, the state was able to contain their resistance to a hyper-local scale through a mix of appeasement (token compensation, promises of jobs or remedial action) and coercion.

By 2013, the power balance began to shift. Two factors—external solidarity and the agency of the Northeast monsoon—played decisive roles in disrupting the state's scalar containment. Drawing on principles of deep, humble, and slow solidarity, the Vettiver Collective cultivated enduring trust and enabled fishers to articulate their claims in democratic spaces, amplifying their voices beyond the village scale. The combination of lawfare (Comaroff & Comaroff, 2009) and layfare—where fisher-activists pursued legal remedies even as they engaged the public through spectacular protests, seafood festivals, music videos, and embodied acts like the *neer satyagraham*—became particularly effective after the 2015 floods. The floods, as a major focusing event, allowed the campaign to link the militant particularism of defending the Ennore wetlands to wider urban concerns of flood mitigation, food sovereignty, and littoral fragility.

This scale-shifting strategy was a deliberate and creative engagement with scalar politics. By upscaling, fishers challenged the framing of their struggle as parochial and positioned themselves as defenders of regional ecological security. By downscaling, as in the *neer satyagraham*, they asserted that this specific river and place mattered. In doing so, they rejected the universalising tendencies of colonial and neoliberal planning logics. Through these actions, they turned the struggle into an epistemic resistance: the production of knowledge not only about 'what' the wetlands are (life, not property) but 'how' such knowledge is made (through embodied, performative, and amphibious practices), and 'where' it is made (in place, not in distant offices or universities).

This directly answers the first research question by showing that subaltern resistance, which may appear to be a reactive protest, is actually a generative epistemic practice. By shifting scales strategically, fishers redefined their struggle as one of knowledge- and world-making, exposing how ignored knowledges can resurface to claim legitimacy in both local and metropolitan arenas.

The findings are significant in that they illuminate the convergence of enabled actors (water-literate activists and legally literate fishers), enabling conditions, and strategic scale-shifting as a pathway for subaltern actors to counteract marginalisation. They also demonstrate how decolonial epistemic practices—rooted in fisher worldviews and expressed through gastro- and amphibious activism, music, and place-based political claiming—can unmask and counter dominant ignorance. By connecting local ecological defence to city-scale resilience and justice, the Ennore and Pulicat campaigns expanded the political salience of their cause, offering a replicable model for other subaltern struggles resisting erasure under neoliberal urbanisation.

Two contributions, relating to the strategies and modes of fisher-activist resistance, emerge from this study. These are layfare and the principles of solidarity—namely, deep, slow and humble solidarity. Layfare was coined to describe the fisher-activist strategies to create counter-public spheres and where possible, occupy the public sphere by appealing to a broader public to mobilise moral authority to bear upon state institutions. It is different from actions directly targeting the state in that it directs indirect pressure on the state by appealing to the conscience of a secondary target—the public.

The principles of solidarity emerged as an equally significant contribution of this struggle to activist praxis. In contexts of asymmetrical privilege, solidarity is always at risk of sliding into charity, reducing subaltern struggles to a ‘cause’, or reproducing the very power relations it seeks to dismantle. The Ennore campaign demonstrated how the practise of deep solidarity (allowing relationships of trust and cross-learning to mature over time), humble solidarity (eschewing saviourism and enabling self-representation), and slow solidarity (anchored in long-term commitment) can mitigate these risks. This approach ensured that mediated access to the public sphere strengthened rather than diluted subaltern perspectives—producing what Chemmencheri (2015) calls a

“mediated subaltern” identity (p. 187), capable of navigating hostile arenas while building its own self-mediated spaces.

These findings suggest that concepts such as Chatterjee’s (2006) political society or subalternity are not fixed but fluid, and that subaltern actors—far from being confined to negotiation or pleading—can strategically employ lawfare, layfare, and creative interventions, and mobilise more-than-human agents to prise open even hostile spaces like the courts of law, the public sphere and civil society. Together, layfare and the practice of principled solidarity show how subaltern actors collaborating with solidarity activists can unsettle erasure and ‘civil’ dispossession and open up transformative possibilities as discussed in the following section.

9.3. Findings: Transformation

The transformative processes and outcomes of resistance revealed by the transformative resistance framework directly address the second research question. The process of sustainability transformation that emerges from the study is not a linear progression achieved through singular ruptures or decisive strategies; nor is it an outcome of a planned, governance-led, top-down process. In Ennore and Pulicat, it presented itself—and continues to do so—as the product of sustained resistance capable of withstanding setbacks (militant enduring), of creative commoning to thwart relational, spatial, temporal and epistemic enclosures, of establishing and maintaining strategic alliances, and of engaging the active agency of more-than-human forces. From the subaltern perspective, sustainability transformation is not a fixed telos located in the future, but a never-ending process of improving the present. It frees the present from the temporal enclosure that seeks to reduce it to a fleeting moment between the past and a promised or dreaded future. In Medina’s terms, Ennore’s fishers and their allies mobilised epistemic friction: they brought dominant and subaltern ways of knowing into contact in ways that made ignorance visible, uncomfortable and, at times, untenable for officials, judges, publics, and activists including solidarity workers like myself who could no longer plausibly claim not to know what was at stake. In this sense, the findings address the second research question, reframing transformation as a present-centred dialectic.

The fisher struggle demonstrated how enabled actors—including fishers and solidarity workers, lawyers, and engaged cultural activists—combined their capacities to expand the reach and legitimacy of the struggle. Key to the effectiveness of such efforts was their ability to strategically mobilise focusing events such as the 2015 floods, and tools such as the CRZ or RTI laws, into enabling conditions for effecting narrative shifts. By blending lawfare with layfare, fishers and SECC linked formal institutional engagement with cultural, performative, and gastronomic interventions that re-introduced meanings of wetlands that were incompatible with extractive capitalist logics.

These methods are decolonial because they refused to remain enclosed within colonial norms of expression. Rather than counter oppressive policy merely by offering evidence-based critiques or submitting counter-policy notes in formal institutional spaces, fishers and their allies used music and visuals, toxic tours, food activism and embodied and amphibious actions to make their point in ways that challenged official reason.

Transformative outcomes were visible in shifts in public discourse, in the preservation of threatened commons, and in the emergence of new political subjectivities capable of navigating hostile arenas without losing subaltern autonomy. The latter is evident in how fishers seized scale-shifting opportunities presented by the 2015 flood event to engage in city-wide flood resilience discourse or in the Pulicat women's gently insurgent occupation of male-dominated stages through the idiom of seafood and ecological knowledge. This occupation, though non-confrontational in tone, was insurgent in its effects: it redefined who could legitimately appear on public political stages and how authority could be claimed through gendered, ecological, and culinary knowledge.

Commoning practices were central to these transformations. Acts such as the *neer satyagraham* and the Pulicat fisherwomen's seafood festival not only reaffirmed the wetlands as shared, life-giving spaces but also upset entrenched gender hierarchies. In so doing, these actions countered spatial, relational and temporal enclosures. In Pulicat, commoning expanded the scope of justice by weaving epistemic and gender struggles together as inseparable dimensions of environmental justice.

Material outcomes, examined under the re-energising dimension of the framework, were often defensive—stopping ecologically damaging projects, slowing industrial encroachment, and holding space for future regeneration. Yet these actions were inextricably entangled with the imaginative work of envisioning alternative futures (through people’s planning exercises, for instance). Endurance made imagination possible, and imagination sustained endurance. This feedback loop kept the struggle alive through moments of exhaustion, defeat and uncertainty.

The findings also highlight the limits and tensions of transformation. Gains remained—and continue to remain—vulnerable to reversal, and the uneven distribution of power within subaltern communities risked reproducing exclusionary dynamics. The bathymetric mapping episode, which marginalised *Irular* women’s perspectives, highlighted how transformation must also confront internal hierarchies. The oil-spill clean-up offered another instance of such tension. Here, activists’ invocation of toxicology as protective knowledge met fishers’ own protective logic, which accepted oil’s toxicity as a continuation of the dangerous normal of their world. Choosing to negotiate clean-up work for a fair wage rather than risk losing it by insisting on safety gear was more than just pragmatism; it was an assertion of survival knowledge. It revealed both the oppressive present of hunger—as fishing in the oil-tainted waters was not an option—and the dangerous everyday normal of a polluted river. This instance too highlighted the importance of attending to epistemic friction in ensuring that the solidarity extended by activists is not powered by a different, though dominant and benevolent ignorance.

Epistemic friction (Medina, 2011),⁷⁹ agents to exert such friction and a relationship of trust between agents that enabled the friction to be engaged with productively rather than dismissed—or worse, harm the relationship—were essential to preventing such reproduction. Creating conditions where this friction could be felt, negotiated, and channelled into inclusive collective action is therefore both a methodological and political imperative. That can be a key strategy to enable diffident knowers to gather the

⁷⁹ Epistemic friction refers to the sustained engagement of divergent and even incommensurable knowledges. Only enabled subaltern actors can generate such friction, and only reflexive systems can meaningfully engage with it.

strength to assert their knowledge in public and within counter-public spaces forged through struggle. This insight shaped the design of the research itself by relying on a solidarity ethnography that sought, among other things, to cultivate epistemic friction in activist ethnography.

The findings indicate that given the right conditions and enabled actors, subaltern struggles for environmental justice can unleash real transformative processes leading to more just, dignified, and sustainable futures, as well as greater reflexivity and democracy in governance and activism. They underscore the role that principled solidarity can play in facilitating such struggles. They emphasise that subaltern EJ struggles must be enthusiastically engaged with and supported, rather than criminalised or dismissed as a nuisance.

Rather than limit study and innovation to engineered, expert-led interventions in the name of nature-based solutions, critical perspectives and innovation must be expanded to learn from and facilitate subaltern resistance. Indeed, the Ennore fishers' struggle is first and foremost a subaltern-led intervention to protect an existing and functioning ecosystem and to draw attention to the socio-ecological benefits offered by healthy or restored ecological systems.

The four-cornered transformative resistance framework, together with the concepts of lawfare and layfare, can be operationalised to analyse other real-world struggles. Their utility lies both in interpreting past and ongoing struggles, and in equipping future ones: it highlights the enabling role of solidarity, the power of commoning, and the necessity of intentionally cultivating epistemic friction as both method and politics. Such scholarship will deepen knowledge about subaltern EJ resistance both as a social phenomenon and as a set of processes that can spotlight neglected outlooks and lead to salutary outcomes. These insights extend political ecology by situating transformation in amphibious and everyday practices, deepen feminist political theory by foregrounding gendered ecological commoning and the reconstitution of epistemic authority, and advance ignorance studies by showing how epistemic friction can be intentionally cultivated as a force for more inclusive futures.

In returning to the second research question, then, the Ennore and Pulicat cases show that subaltern struggles contribute to transformative change not by exiting the field of ignorance and domination, but by reworking it from within—enduring, commoning, opening up and re-energising in ways that keep alive multiple, justice-oriented futures in the present. If the struggles themselves hinged on solidarity, epistemic friction, and commoning, so too did the research process. The next section reflects on methodology—particularly how the principles of deep, slow, and humble solidarity informed my approach to activist ethnography and shaped the kind of knowledge this thesis could generate.

9.4. Reflections on Methodology

Methodologically, this research contributes to “activist ethnography” which Deschner and Dorion (2020) define as “an ethnographic engagement with social movement organizations as antiauthoritarian, anarchist, feminist and/or anti-racist collectives” (p. 205). Conventional ethnography can often fall short in engaging with ongoing struggles where power asymmetries and the urgency of manifest and threatened injustice require more than detached, or even just participant, observation. This thesis’ approach, which I describe as solidarity ethnography, was anchored in the principles of *deep, slow, and humble solidarity* (See Section 5.3.1).

Solidarity ethnography introduces two key nuances to activist ethnography. First, it treats solidarity not as a stance external to research but as a methodological commitment that shapes what knowledge is generated, how it is shared, and who claims authorship. Second, it frames the ethnographer not as a translator of subaltern voices for elite publics but as a co-defender of discursive and material spaces where those voices can resonate on their own terms. In this sense, solidarity ethnography extends activist research traditions. It resonates with the fishers’ amphibious activism as it negotiates the liminal space between activism and academic research without succumbing to dualist compulsions demanding a clear line between the two. In both activism and research, solidarity calls attention to the activist-researcher’s need to maintain a critical reflexivity about positionality and the risks of reproducing hierarchies.

By foregrounding solidarity as method, this research demonstrates that epistemic friction—so vital to resisting erasure and enabling transformation—cannot simply be ‘found’ in the field. It must be generated through relationships of trust, practices of commoning, and the cultivation of spaces where divergent knowledges can encounter each other. Solidarity ethnography, then, is not simply a way of studying social movements but of participating in the assertion and negotiation of what counts as knowledge and whose knowledge counts. Rather, it provides a framework for re-grounding activist ethnography in solidarity principles contributing to ethnographic methods and making them more effective and socially meaningful. Such a move strengthens the analytical depth of the research and enhances its ethical integrity, ensuring that the work of knowledge production is itself accountable to those at the margins who are struggling for justice.

While solidarity ethnography offers distinct analytical and ethical advantages, it also carries limitations and risks. My long-term involvement with the Ennore and Pulicat struggles opened up forms of access and insight that are unavailable to detached observers, even as it constrained what can be said, when, and to whom. The analysis is unavoidably situated in my relationships with fisher leaders, bureaucrats, and fellow activists, and other readings of the same field are possible. Moreover, although the principles of deep and slow solidarity provide ethical depth and relational resilience, they may not always be feasible for activist–community partnerships working under urgent timelines or volatile political conditions. In such circumstances, solidarity research may need to take faster, situational, or episodic forms without losing its orientation toward humility, safety, reciprocity, and reflexivity. Recognising this contingency prevents the framework from becoming prescriptive and keeps solidarity ethnography adaptable to a range of struggles and temporalities. The single-case design and focus on one set of networks also limit the extent to which findings can be generalised. The more appropriate aspiration is analytic generalisation: offering concepts and patterns that other scholars and activists can test, adapt, or contest in different contexts.

Finally, there are ethical silences in this thesis: episodes, actors or conflicts that I could not discuss without jeopardising trust or safety. These silences are themselves part of

the politics of solidarity ethnography. Acknowledging them is crucial because it underscores that knowledge production in struggle is never complete or costless; it proceeds through choices about what to surface and what, at least for now, to keep below the waterline.

Analytically, the research was guided by an abductive approach, described earlier as a three-cornered dialogue between data, my observations and interpretations, and existing theory. Rather than moving from theory to hypothesis to test, or from data to grounded theory, the analysis iteratively moved back and forth between field encounters, conceptual frameworks (ignorance studies, Lefebvrian urban theory, insurrectionary political ecology, feminist and subaltern studies) and emergent interpretations. This approach allowed the concepts of ‘civil’ dispossession, transformative resistance and solidarity ethnography to emerge and be refined in response to empirical tensions and surprises.

9.5. Future Directions

Solidarity ethnography and ‘civil’ dispossession both offer key areas for further development, and both are grounded in similar preoccupations with power and the production of knowledge and ignorance. Relatedly, the thesis flagged the idea of a littoral political ecology (see Section 9.1) as an ignorance-centred avenue for future research. While not fully developed here, its potential to move urban political ecology beyond its largely terrestrial orientations into amphibious and other fluid domains—from coasts, river floodplains and wetlands to urban informality and queer spaces—warrants further exploration. Such a littoral perspective also has implications for how urbanisation is understood.

In Ennore, this is evident in how urbanisation appears as fragmented, contested incursions into amphibious worlds. Settlements such as Kattukuppam and Mugathwarakuppam—dense in built form yet functioning as *meenava gramam* (fisher village)—destabilise the urban/non-urban binary, pointing instead to a liminal condition shaped by overlapping ecological, economic, and cultural transitions. Thus, urbanisation is not simply imposed or resisted, but selectively taken up, negotiated,

and contested by marginalised communities, who value forms of connectivity, mobility, and infrastructure while resisting its dispossessive and colonising tendencies. The littoral, then, does not sit at the margins of the urban or serve as a backdrop for urbanisation but becomes an analytic for understanding urbanisation itself.

Building on this, future work could pursue comparative studies across other littoral urban struggles—in South Asia, the Pacific, and beyond—to test and refine the concepts of transformative resistance and ‘civil’ dispossession, while also generating material for the development of a theory of amphibious or littoral urbanism grounded in the informal spatial practices of subaltern and marginalised communities. Such comparative work could also incorporate mixed methods, including participatory mapping, media analysis and network analysis of solidarity formations, to complement the ethnographic emphasis of this thesis.

9.5.1. Expanding Solidarity

The thesis refers to, without elaborating, the concept of ‘safe solidarity.’ This concept can expand and enrich the principles of solidarity and solidarity ethnography (see Section 1.8.2). Activism is fraught with dangers of retaliation by the state, corporations and other vested interests, including from within one’s own community. Such dangers are greater for subaltern actors, though solidarity workers are not immune. Struggle tactics can also harm the environment and non-human life if not developed and executed mindfully. Safe solidarity emphasises that acts of solidarity must be co-developed with an explicit awareness of risks and strategies to mitigate them.

Practising solidarity in this way is not simply about protecting individuals or the environment. It is also a strategy for preserving the endurance of a struggle, which can otherwise be exhausted when violent repression takes its toll. By foregrounding safety, solidarity ethnography gains a sharper ethical and methodological edge: researchers and activists alike must know not only how to stand with others, but also how to do so without exposing them, themselves or the environment to disproportionate harm. The differing notions of safety evident in the oil-spill clean-up point to the need for reflexivity, to prevent a concern for safety from turning into an oppressive or patronising act that ignores the very realities solidarity seeks to illuminate. In this sense, safe

solidarity becomes both a principle of care and a tactic of resistance, ensuring the endurance of struggles.

Future research could elaborate on safe solidarity through comparative inquiry across movements, asking how different struggles—for instance against mining, dams, ports or for forest and marine rights—negotiate the trade-offs between visibility and vulnerability, and how solidarity relations can be organised to distribute risk more equitably rather than concentrating it on already precarious bodies, and reveal dominant ignorance rather than reproduce it.

9.5.2. Expanding the Concept of ‘Civil’ Dispossession

As already mentioned, solidarity ethnography and ‘civil’ dispossession are rooted in the same concerns: that practices and institutions that appear or intend to be emancipatory carry within them the logics of containment, exclusion, and erasure. Where solidarity requires reflexivity and safety to avoid reproducing hierarchies in activism or research, ‘civil’ dispossession conceptually focuses on what is ignored—rather than what is known—to uncover how liberal-democratic institutions sustain dispossession, reproducing unequal orders even when they appear to grant recognition, relief or emancipation.

This thesis developed ‘civil’ dispossession to highlight how dispossession of non-property spaces—the material commons—is carried out despite or even enabled by liberal institutions and spaces. However, the concept can be expanded to do more work. Here are three ways in which this concept can be developed.

9.5.2.1. *Beyond materiality*

Going beyond this thesis’ focus on ignorance-based logics of dispossession of material commons, ‘civil’ dispossession can also be used to understand how subaltern actors are deprived of epistemic, civic, and political agency. It invites inquiry into how liberal institutions define what counts as credible knowledge, legitimate participation, or reasonable dissent—and how these definitions subtly reproduce hierarchies even within seemingly egalitarian spaces.

9.5.2.2. *Interrogating civil society*

The thesis does not adequately examine the popular representation of civil society as a buffer against authoritarianism. It refers to but does not critically examine how civil society can be a site of exclusion, where participation is conditional on bourgeois norms of civility, reasonableness and expertise. A targeted ignorance-based critique on the role of NGOs, media, solidarity actors, think-tanks, academic and scientific institutions in climate politics, new discourses on blue economy and in the politics of place-based struggles could enrich critiques of liberal democracy.

9.5.2.3. *Critical jurisprudence*

Judgements that appear emancipatory by offering conditional relief or recognition, or compensation may simultaneously limit future claims and foreclose deeper systemic transformation. They may reproduce extant socio-spatial hierarchies by recognising certain actors while excluding marginalised others, including non-human claimants. They may be built on judicial reasoning that privileges ‘expert’ testimony while sidelining experiential and place-based subaltern knowledges.

Turning the lens of ignorance to the logics, doctrines and epistemologies of court judgements brings a new frame to reveal the dispossessive or emancipatory tendencies of courts and liberal law. Such analyses can enrich jurisprudence and cultivate more reflexivity among legal practitioners and the judiciary.

Together, these three extensions to ‘civil’ dispossession open the door to a deeper integration of ignorance studies into (urban) political ecology, legal studies (including legal anthropology) and dispossession theory. More ambitiously, they invite a rethinking of what counts as ‘civil’ at all. If, as the Ennore case suggests, civility, legality and techno-scientific expertise can be routinely mobilised to dispossess commons and commoners, then the task is not only to denounce particular abuses but to interrogate the very grammars of civility and reason through which liberal-democratic orders govern, exclude, and legitimise authority. Here too, subaltern struggles—and the knowledges and solidarities they generate—offer indispensable resources for imagining other, more just ways of living together.

9.5.3. A Case for a Littoral Turn to Political Ecology

This thesis points to certain analytical emphases that help give form to a Littoral Political Ecology—first empirically, in the analysis of quick and slow erasures in Section 6.7, and later conceptually in Section 9.1. The Ennore case showed that the littoral is not merely an interface between land and sea but a shifting terrain where legality, belonging, and knowledge are continually remade. Building from these insights, a Littoral Political Ecology extends political ecology by attending to the specific conditions of littorality, in-betweenness, and fluidity that define such spaces. The littoral is a zone of defiance of binaries—wet and dry, land and water, legality and illegality, activism and research. This in-betweenness disturbs the stable categories through which planning, property, and participation are typically organised, demanding analytical approaches that can inhabit uncertainty and difference rather than resolve them.

Even though land itself is not inherently stable, it has historically been more amenable to provisional stabilisation through enclosure, law, infrastructure, and repeated fortification. The littoral's intersecting tidal, sedimentary, and atmospheric processes, by contrast, continually undermine fixity, exposing more rapidly and more visibly the provisional and fragile nature of all attempts at settlement. Flattening the littoral therefore demands the mobilisation of specialised forms of ignorance, as its heightened volatility and uncertainty test the limits of a political ecology developed primarily for, and from, land-centred contestations. This points to the need to interrogate the littoral from the littoral itself.

Littoral Political Ecology thus proposes an ignorance-based exploration of political ecology through a genealogy of ignorance. It traces how ignorance is produced, sustained, and undone in these unstable zones and times, and how visibility, knowledge, and non-knowing together shape the politics of the littoral. In doing so, it connects the epistemic to the ecological, revealing how bureaucratic, juridical, and expert forms of not-knowing materially shape what lives or dies in fluid ecologies.

A third feature of Littoral Political Ecology is its attention to the agency of lively more-than-human forces—sea-level rise, weather events, tides, floods, sediments, species, and seasonal cycles—which do not simply form the backdrop to human action but actively constitute power relations and the conditions of struggle. Fourth, Littoral Political Ecology attends to the fluid dynamics of subaltern agency, viewing it as a contingent and shifting capacity that is continually made and eroded through encounters with ignorance, power, and the more-than-human.

Training this lens on the fluid world of the coast is particularly relevant today, when new and potent forms of extraction, dispossession, and accumulation are taking shape in the name of the Blue Economy and climate action. Together, these dimensions make Littoral Political Ecology an ignorance-centred, amphibious political ecology capable of explaining how space, power, and knowledge are co-produced in fluid terrains.

The cases examined in this thesis already provide the empirical ground to inductively shape such a framework. Each episode—from the erasures of colonial industrialisation to the amphibious activism of Pulicat—reveals how littoral struggles enact and theorise in-betweenness in practice. Re-analysing these cases through an explicit Littoral Political Ecology lens could yield grounded conceptual categories for understanding how ignorance, fluidity, and more-than-human forces interact in the production of space and resistance. Future research could apply these insights comparatively across deltas, estuaries, lagoons, and urban wetlands, linking the amphibious struggles of Ennore and Pulicat to other fluid geographies confronting extractive urbanisation and climate crisis.

9.5.4. Sustainable Transformations: Final Reflections

The three conceptual trajectories developed in this thesis—‘Civil’ dispossession, Solidarity Ethnography, and Littoral Political Ecology—reimagine how power, knowledge, and resistance intertwine in the pursuit of sustainability transformation. ‘Civil’ dispossession exposes how liberal and ostensibly emancipatory institutions reproduce inequality and erasure through ignorance masked as civility. Solidarity Ethnography repositions research itself as a practice of ethical and epistemic

accountability, demonstrating that knowledge production in struggle requires humility, reciprocity, and care. Littoral Political Ecology extends these insights to the fluid and contested terrains where social, ecological, and epistemic processes interlace most visibly, foregrounding in-betweenness, more-than-human agency, and the fluid dynamics of subaltern emergence and erosion.

From their convergence emerges a broader insight: transformation begins not when ignorance ends, but when its dominion is recognised and resisted—when the realisation of ignorance becomes the ground on which new solidarities, knowledges, and ecologies are built. From the margins of Chennai’s wetlands, this thesis has shown that the work of unmaking erasure and remaking futures is inseparable from the struggle to see, feel, and live differently. It is here—in the refusal to forget, in the courage to stay with the trouble, and in the persistence of littoral worlds and communities—that the possibility of a just and sustainable transformation endures.

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Appendices

Appendix 1

Te Wānanga o Ngā Kete | **Division of Arts,
Law, Psychology & Social Sciences**

The University of Waikato
Private Bag 3105
Hamilton 3240
New Zealand

Te Kura Whatu Oho Mauri
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THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

Nityanand Jayaraman

Professor Priya Kurian
Dr Pat Barrett

Te Kura Aronui
School of Social Sciences

22 August 2023

Dear Nityanand

Re: FS2023-43: Struggle and Solidarity in Transforming Urban Futures: The Fisher Fight for Ennore Wetlands

Thank you for submitting your revised application to the ALPSS Human Research Ethics Committee. We have reviewed the final electronic version of your application and the Committee is now pleased to offer formal approval for your research activities as included therein.

We encourage you to contact the committee should issues arise during your data collection, or should you wish to add further research activities or make changes to your project as it unfolds. We wish you all the best with your research. Thank-you for engaging with the process of Ethical Review.

Kind regards

Dr Oleg Medvedev, Convenor
Division of Arts, Law, Psychology & Social Sciences Human Research Ethics

Appendix 2

Information Sheet for Fisher Village Administrations

My name is Nityanand Jayaraman. I am currently pursuing my PhD research at the University of Waikato, Hamilton, New Zealand. My research is guided by Dr. Priya Kurian, principal supervisor, and Dr. Patrick Barrett. I have entered academia after 30 years as a journalist and social activist. In my latter capacity, I have been engaged as a solidarity activist with grassroots struggles for environmental justice for three decades. As a solidarity actor, I have mobilised law-, science-, arts- and media-based support for community struggles.

My PhD research topic is prompted by my deep anxiety over the multiple ecological challenges and the crisis of inequality facing humanity. My research is about the role of environmental justice struggles of historically marginalised communities in protecting the environment, deepening democracy, reducing status inequalities and, therefore, ushering in socially just sustainability transformation. For this, I have chosen your community's 30-year long struggle to save the oceans and tidal wetlands from industrial encroachments and degradation.

I have already spent more than 10 years as part of this struggle and have learnt a lot from elders and comrades in the community about fishing practices, the changing state of fishing, fisher worldview and the struggle. Until now, our interactions have been specifically designed towards planning the course of the struggle. However, now, I would like to interact with members of the community and facilitate a process of mutual reflection and analysis of the struggle. In 1997, the Government introduced a map that erased the river and replaced it with the TIDCO petrochem park. However, through your community's efforts, that map was set aside in 2021 by the National Green Tribunal. In a separate case, Ennore fishers have also won an order directing the government to notify the Ennore backwaters as a wetland and to take steps to restore it. This is a significant victory even though it remains largely on paper at this point.

I wish to understand how members of your community view their response to changing conditions over the years to emerge from the margins, mobilise solidarity and take strategic action to protect the wetlands. The interactions will be in the form of

conversations with individuals and small groups from your village. They will be audio recorded to enable me to transcribe it for my research purposes. Through the course of my 4-month fieldwork in Chennai, I will continue to engage with the village in my ongoing capacity as a solidarity worker. This too will inform my research.

The village's involvement in the interview

I wish to seek the approval of the village administration to carry out this research. Over the next four months, I would like to visit your village to meet various members of the village—elders (women and men), and other fishers who have been engaged in administration of the village over the years. I will separately explain all that I have explained above to each of the individuals I choose to interview and secure their consent before interacting with them.

Research Outputs

The main output of this research will be a research thesis which will be available publicly. I can offer a print copy of the thesis for the village archive. During and after my research, I will also write articles in newspapers, academic journals and social media platforms. Additionally, I will compile my research findings in the form of a book chronicling the history, as told by fishers, of their struggle to save the Ennore wetlands. This book will be presented to the Ennore villages to distribute and retain as part of the community archives. I believe this is important because history is usually written by those in power and tends to ignore and distort the views of others, particularly those from the margins.

What to do if you have concerns/questions about the ethical conduct of this research

This research project has been approved by the Human Research Ethics Committee of the Division of Arts, Law, Psychology and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee

email alpss-ethics@waikato.ac.nz

Postal Address: Division of Arts, Law, Psychology and Social Sciences, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Village approval

By affixing your signature below, the village, through its authorised representative, conveys its approval for the research, for my presence in the village at reasonable times and my contacting village members for the purposes of the research.

Signature of Authorised Village Representative

Researcher's

Signature

Information Sheet for Fisher Participants

My name is Nityanand Jayaraman. I am currently pursuing my PhD research at the University of Waikato, Hamilton, New Zealand. My research is guided by Dr. Priya Kurian, principal supervisor, and Dr. Patrick Barrett. I have entered academia after 30 years as a journalist and social activist. In my latter capacity, I have been engaged as a solidarity activist with grassroots struggles for environmental justice for three decades. As a solidarity actor, I have mobilised law-, science-, arts- and media-based support for community struggles.

My PhD research topic is prompted by my deep anxiety over the multiple ecological crises and the crisis of inequality facing humanity. My research is about the role of environmental justice struggles of historically marginalised communities in protecting the environment, deepening democracy, reducing status inequalities and, therefore, ushering in socially just sustainability transformation. For this, I have chosen your community's 30-year long struggle to save the tidal wetlands and the seas from industrial encroachments and degradation.

I have already spent more than 10 years as part of this struggle and have learnt a lot from elders and comrades in the community about fisher worldview, fishing practices, the changing state of fishing, how fishers relate to the lands and wetlands and the struggle itself. Until now, our interactions have been specifically designed towards planning the course of the struggle. However, now, I would like to interact with members of the community to facilitate a process of mutual reflection and analysis of the struggle. In 1997, the Government introduced a map that erased the river and replaced it with the TIDCO petrochem park. However, through your community's efforts, that map was set aside in 2021 by the NGT. In a separate case, Ennore fishers have also won an order directing the government to notify the Ennore backwaters as a wetland and to take steps to restore it. This is a significant victory even though it remains largely on paper at this point.

Through our interaction, I intend to understand how you see the community's response to changing conditions over the years to emerge from the margins, mobilise solidarity and take strategic action to protect the wetlands. The interactions will be in the form of

informal conversations and will be recorded to enable me to transcribe it for my research purposes. Through the course of my 4-month fieldwork in Chennai, I will continue to engage with the village in my ongoing capacity as a solidarity worker. This too will inform my research.

Separately, I have secured the approval of the village administration. This information sheet is being provided to you as background to help you evaluate if you would find it worthwhile to participate in my study.

Your involvement in the interview

I will conduct the interviews in the village or at a location and time of our mutual convenience. I will have a set of questions covering the topics of interest. I would like to audio record the conversation, with your approval, to help me transcribe it. The audio record will not be used for anything other than transcription without your express approval. A copy of the transcript of the interview can be made available to you on request for you to review and suggest changes. Given that the research relates to the interaction, sometimes confrontational, between fishers and powerful entities like corporations and government and the vulnerabilities that such a relationship generates, I urge you to not disclose your identity during the research or interview.

You have the right to:

Ask questions about my research.

Not answer certain questions.

Request full anonymity—name, village will not be disclosed.

Request partial anonymity—name will not be disclosed.

Request the pausing of the recorder at any time.

Review the transcript of the interview, and amend and give consent for its use

Withdraw from the research within three weeks after completion of interview or up to two weeks after receiving the transcript. You can withdraw by contacting me over phone or WhatsApp.

Privacy and Confidentiality

If you prefer to remain fully or partially anonymous, you can indicate that in the consent form and I will ensure that your identity remains anonymous.

Research Outputs

The main output of this research will be a research thesis which will be available publicly. During my research, I will also write articles in newspapers, academic journals and social media platforms. Additionally, I will compile my research findings in the form of a book chronicling the history, as told by fishers, of their struggle to save the Ennore wetlands. This book will be addressed to a general audience and presented to all participants, and specifically to the Ennore-Pulicat villages to distribute and retain as part of their community archives. I believe this is important because history is usually written by those in power, and tends to ignore and distort the views of others, particularly of those from the marginalised communities.

What to do if you have concerns/questions about the ethical conduct of this research

This research project has been approved by the Human Research Ethics Committee of the Division of Arts, Law, Psychology and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee

email alpss-ethics@waikato.ac.nz

Postal Address: Division of Arts, Law, Psychology and Social Sciences, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Information Sheet for Non-Fisher Participants

My name is Nityanand Jayaraman. I am currently pursuing my PhD research at the University of Waikato, Hamilton, New Zealand. My research is guided by Dr. Priya Kurian, principal supervisor, and Dr. Patrick Barrett. I have entered academia after 30 years as a journalist and social activist. In my latter capacity, I have been engaged with grassroots struggles for environmental justice. As a solidarity actor, I have mobilised law-, science-, arts- and media-based support for community struggles.

My PhD research topic is prompted by my deep anxiety over the multiple ecological challenges and the crisis of inequality facing humanity. My research is about the role of environmental justice struggles of historically marginalised communities in protecting the environment, deepening democracy, reducing status inequalities and, therefore, ushering in socially just sustainability transformation. For this, I have chosen the 30-year long struggle by Ennore fishers to save the tidal wetlands from industrial encroachments and degradation. I have been involved in this struggle since 2013 as a solidarity worker. I remain involved.

Through their persistent efforts, Ennore fishers have succeeded in building city-wide awareness about the importance of wetlands, and won an order from the National Green Tribunal directing the government to notify the Ennore backwaters as a wetland and to take steps to restore it. Emerging from the margins, they have managed to shift the discourse from “industrialisation is good” to “wetlands are better.” These are significant victories even though the legal victories remain only on paper at this point.

Through our interaction, I intend to understand broader issues that derive from the Ennore case, and more generally about the tensions between development and environment, jobs and livelihood and the varying perspectives of the state vis-à-vis historically marginalised communities. I am interested in learning your perspectives on how discourses and narratives around environment, development and social justice have shifted over the years and on the role of grassroots struggles in deepening democracy and ushering sustainability transformations. I am particularly interested in locating these conversations within the specific historical, socio-political context of Dravidian politics in Tamil Nadu.

The interactions will be in the form of conversations and will be recorded, with your permission, to enable me to transcribe it for my research purposes. Through the course of my 4-month fieldwork in Chennai, I will continue to engage with the village in my ongoing capacity as a solidarity worker. This too will inform my research.

This information sheet is being provided to you to help you evaluate if you would find it worthwhile to participate in my study.

Your involvement in the interview

I will conduct the interviews at a location and time of our mutual convenience. I will have a set of questions covering the topics of interest. The interview will be in the form of a conversation. I would like to audio record the conversation, with your approval, for transcription purposes. No part of the audio record will be used for anything other than transcription without your express approval. A copy of the transcript of the interview can be made available to you on request for you to review and suggest changes or retract sections.

You have the right:

To ask questions about my research.

To not answer certain questions.

To request full anonymity—name, affiliation or any identity markers (other than affiliation such as “an official,” “an activist” or “a scholar”) will not be disclosed.

To request partial anonymity—name will not be disclosed.

To request for pausing the recorder at any time.

Review the transcript of the interview, and amend and give consent for its use

To withdraw from the research within three weeks after completion of interview or up to two weeks

after receiving the transcript. You can withdraw by contacting me over phone or whatsapp.

Privacy and Confidentiality

If you prefer to remain fully or partially anonymous, you can indicate that in the consent form and I will ensure that your identity remains anonymous.

Research Outputs

The main output of this research will be a research thesis which will be available publicly. During and after my research, I will also write articles in academic journals, newspapers and social media platforms. Anonymity (for those that request it) will be maintained in all outputs. Additionally, I will compile my research findings in the form of

a book chronicling the history, as told by fishers, of their struggle to save the Ennore wetlands. This book will be addressed to a general audience and presented to all participants, and specifically to the Ennore-Pulicat villages to distribute and retain as part of their community archives.

What to do if you have concerns/questions about the ethical conduct of this research

This research project has been approved by the Human Research Ethics Committee of the Division of Arts, Law, Psychology and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee

email alpss-ethics@waikato.ac.nz

Postal Address: Division of Arts, Law, Psychology and Social Sciences, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Information Sheet for Participants of Focus Group Discussions

My name is Nityanand Jayaraman. I am currently pursuing my PhD research at the University of Waikato, Hamilton, New Zealand. My research is guided by Dr. Priya Kurian, principal supervisor, and Dr. Patrick Barrett. I have entered academia after 30 years as a journalist and social activist. In my latter capacity, I have been engaged with grassroots struggles for environmental justice. As a solidarity actor, I have mobilised law-, science-, arts- and media-based support for community struggles.

My PhD research topic is prompted by my deep anxiety over the multiple ecological challenges and the crisis of inequality facing humanity. My research is about the role of environmental justice struggles of historically marginalised communities in protecting the environment, deepening democracy, reducing status inequalities and, therefore, ushering in socially just sustainability transformation. For this, I have chosen the 30-year long struggle by Ennore fishers to save the tidal wetlands from industrial encroachments and degradation. I have been involved in this struggle since 2013 as a solidarity worker. I remain involved.

Through their persistent efforts, Ennore fishers have succeeded in building city-wide awareness about the importance of wetlands, and won an order from the National Green Tribunal directing the government to notify the Ennore backwaters as a wetland and to take steps to restore it. Emerging from the margins, they have managed to shift the discourse from “industrialisation is good” to “wetlands are better.” These are significant victories even though the legal victories remain only on paper at this point.

Through a group interaction, I wish to understand how the individuals in the group make sense of their actions and changing conditions with particular emphasis on the history and present status of the Ennore wetlands and the struggle. I am interested in understanding fisher perspectives in relation to the meanings of land and water, and on the prevalent tensions between development and environment, jobs and livelihood and the varying perspectives of the state vis-à-vis historically marginalised communities. I am interested in learning your perspectives on how discourses and narratives around environment, development and social justice have shifted over the years and on the role

of grassroots struggles in deepening democracy and ushering sustainability transformations.

The interactions will be in the form of conversations and will be recorded. Since it is a group discussion, I cannot ensure anonymity during the discussion. So it would be important for you to only reveal thoughts and opinions that you are comfortable sharing in public.

This information sheet is being provided to you to help you evaluate if you would find it worthwhile to participate in my study.

Your involvement in the interview

The discussion will take place at a location and time of the group's convenience. I will have a set of questions covering the topics of interest. The discussion will be audio recorded with permission. No part of the audio record will be used for anything other than transcription. You are welcome to approach me for a transcript of the discussion.

You have the right:

To ask questions about my research.

To not answer certain questions.

To request for pausing the recorder at any time.

To withdraw from the discussion at any point.

Privacy and Confidentiality

Participants in the group discussion will not be identified by name in my research reports.

Research Outputs

The main output of this research will be a research thesis which will be available publicly. During my research, I will also write articles in newspapers, academic journals and social media platforms. Anonymity (for those that request it) will be maintained in all outputs. Additionally, I will compile my research findings in the form of a book chronicling the history, as told by fishers, of their struggle to save the Ennore wetlands. This book will be addressed to a general audience and presented to all participants, and specifically to the Ennore-Pulicat villages to distribute and retain as part of their

community archives. I believe this is important because history is usually written by those in power, and tends to ignore and distort the views of others, particularly of those from the marginalised communities.

What to do if you have concerns/questions about the ethical conduct of this research

This research project has been approved by the Human Research Ethics Committee of the Division of Arts, Law, Psychology and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee

email alpss-ethics@waikato.ac.nz

Postal Address: Division of Arts, Law, Psychology and Social Sciences, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Participant Consent Form

I am grateful for your willingness to participate in my research.

Name of research project: Struggle and Solidarity in Transforming Urban Futures: The Fisher Fight for Ennore Wetlands

Name of researcher: Nityanand Jayaraman, PhD Student, Political Science and Public Policy, School of Social Sciences, University of Waikato, Hamilton, New Zealand

Name of research participant: _____

Kindly go through the below consent form. By signing on this or orally indicating your willingness to participate, you are declaring that you understand the purpose, scope and implications of your involvement in the interview, and that your participation is completely voluntary. The interview will last between 1 and 2 hours.

I have read the information sheet/I have had the information sheet read and explained to me. I understand that by signing this form or orally offering my consent, I approve the following:

- This interview will be audio-recorded and transcribed
- Your identity will be protected and anonymity guaranteed if you indicate that as your preference
- My research team, which includes my two supervisors, a transcriber and myself, are the only ones who will have access to the transcript other than you
- If you wish to review the transcript, please provide your email address or postal address
- All interview transcripts will be analysed as part of my PhD research
- My research study will result in a publicly available doctoral thesis, articles for academic journals and popular media. Additionally, I will also produce a chronicle of the Ennore struggle for popular consumption containing the history, as seen and told by the region's fishers.
- The actual audio-recording will be kept for five years and then destroyed

As a participant you have the right to:

- Ask questions about my research
- Not answer particular questions

- Request full anonymity—name, affiliation, village etc will not be disclosed
- Request partial anonymity—name will not be disclosed
- Request for pausing the recorder at any time
- Stop the interview and withdraw from the interview at any time
- Review the transcript of the interview, and amend and give consent for its use
- Withdraw from the research within three weeks after completion of interview or up to two weeks after receiving the transcript. You can withdraw by contacting me over phone or whatsapp

Please complete the following checklist. Tick [] the appropriate box for each point. YES NO

I agree to be interviewed for 1 - 2 hours. Yes No

I agree to having this interview audio recorded and transcribed. Yes No

I wish to receive a copy of the transcript. Yes No

If yes, please provide your email ID/postal address: _____

I wish to receive research outputs of this study.

I wish to remain completely anonymous Yes No

I wish to remain partly anonymous (Name will not be revealed) Yes No

I understand that taking part in this study is voluntary. I have the right to not answer any individual questions in the study and to withdraw from the study up to three weeks after completion of interview or up to two weeks after receiving the transcript.

Participant's signature _____ Date _____ Place _____

Researcher's signature _____ Date _____ Place _____

This research project has been approved by the Human Research Ethics Committee of the Division of Arts, Law, Psychology and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee

email alpss-ethics@waikato.ac.nz

Postal Address: Division of Arts, Law, Psychology and Social Sciences, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Researcher's contact information

Nityanand Jayaraman, PhD Student in Political Science and Public Policy,
School of Social Sciences, University of Waikato, Hamilton, New Zealand

Email: nity682@gmail.com

Phone: +91 944482401

Research Supervisor's contact information:

Professor Priya Kurian, Chief supervisor

Political Science & Public Policy

School of Social Sciences

University of Waikato, Hamilton, New Zealand

Email: priya.kurian@waikato.ac.nz

Participant Consent Form (Focus Group Discussion)

I am grateful for your willingness to participate in my research.

Name of research project: Struggle and Solidarity in Transforming Urban Futures: The Fisher Fight for Ennore Wetlands

Name of researcher: Nityanand Jayaraman, PhD Student, Political Science and Public Policy, School of Social Sciences, University of Waikato, Hamilton, New Zealand

Name of research participant: _____

Kindly go through the below consent or permission form. By signing on this or orally indicating your willingness to participate, you are declaring that you understand the purpose, scope and implications of your involvement in the interview, and that your participation is completely voluntary. The interview will last between 1 and 2 hours.

I have read the information sheet/I have had the information sheet read and explained to me. I understand that by signing this form or orally offering my consent, I approve the following:

- This interview will be audio-recorded and transcribed
- As this is a group discussion, I cannot protect your identity or guarantee anonymity. Kindly share only such information that you are comfortable making public.
- It will not be possible to withdraw from the research after the discussion is complete because I will not be able to identify your inputs from the audio recording. However, you are welcome to leave the discussion at any time.
- Your name or identity will not be revealed. All participants will be referred by a pseudonym, gender and village.
- My research team, which includes my two supervisors, a transcriber and myself, are the only ones who will have access to the transcript.
- If you wish to review the transcript, please provide your postal address
- All interview transcripts will be analysed as part of my PhD research
- My research study will result in a publicly available doctoral thesis, articles for academic journals and popular media. Additionally, I will also produce a chronicle of the Ennore struggle for popular consumption containing the history, as seen and told by the region's fishers.
- The audio-recording will be kept for five years and then destroyed

As a participant you have the right to:

- Ask questions about my research
- Not answer particular questions
- Request for pausing the recorder at any time
- Withdraw from the discussion at any time

Please complete the following checklist. Circle “Yes” or “No” to indicate your choice on each question.

I agree to be interviewed for 1 - 2 hours. Yes No

I agree to having this interview audio recorded and transcribed. Yes No

I wish to receive a copy of the transcript. Yes No

If yes, please provide your postal address: _____

I wish to receive research outputs of this study Yes No

I understand that taking part in this study is voluntary. I have the right to not answer any individual questions in the study and to withdraw at any time during the discussion. I will keep information shared by other participants during the discussion confidential and am assured that others will act similarly.

Participant’s signature _____ Date _____ Place _____

Researcher’s signature _____ Date _____ Place _____

This research project has been approved by the Human Research Ethics Committee of the Division of Arts, Law, Psychology and Social Sciences. Any questions about the ethical conduct of this research may be sent to the Secretary of the Committee

email alpss-ethics@waikato.ac.nz

Postal Address: Division of Arts, Law, Psychology and Social Sciences, University of Waikato, Te Whare Wananga o Waikato, Private Bag 3105, Hamilton 3240.

Researcher's contact information

Nityanand Jayaraman, PhD Student in Political Science and Public Policy,
School of Social Sciences, University of Waikato, Hamilton, New Zealand

Email: nity682@gmail.com

Phone: +91 944482401

Research Supervisor's contact information:

Professor Priya Kurian, Chief supervisor

Political Science & Public Policy

School of Social Sciences

University of Waikato, Hamilton, New Zealand

Email: priya.kurian@waikato.ac.nz

Interview Guide (Fisher Elders)

Individual informants (Group Discussion Questions marked with *)

Background

Self Introduction

Request permission for audio recording

Reminder about systems of confidentiality

Questions (Extracts of relevant questions will be taken to design interviews for different respondents. Also, covering these questions will take several sessions with each individual or group)

Memories

- 1) Tell me a bit about yourself and your family. Are you and your family originally from this village? If not, where did you/your parents move from, when and why?
- 2) Tell me about your first memories of your village, the people, the river.
- 3) What are your memories of your mother when you were growing up? What about your father? What did they do? Were they fishers?
- 4) What do you remember of their fishing days?
- 5) When did you get involved in fisher work? What kind of work did you do—fish vending, fishing etc? Describe your early days in the trade? Who did you learn from? What did you like/dislike about it?
- 6) For fishers: What are your strongest memories of your fishing? Can you remember any significant incident that has made a mark on your mind?
- 7) For fishers: Of all the places in the river, which are the places that have the most meaning for you? Why? Tell me more about the place.

Meanings of River*

- 8) What is River?
- 9) Describe your relationship to the river? Describe your community's relationship with the river? Has this changed? If so, how? If not, why not?
- 10) How do you think others view the river and the lands around Ennore-Pulicat?
- 11) As a fisher, how would you describe the waters that you fish? What are the different parts of the river? What are its characteristics? What is found where?

- 12) Before industries came, what was the region like? What kinds of people lived here? What did they do? What relationships, if any, existed between your community and others?
- 13) How did salt affect fisheries? Describe the salt pans and any interaction between fishers and the salt lands.

About erasures*

- 14) How has the river changed? Why has it changed? What has been lost as a result?
- 15) Describe what it feels like to fish in the river? What do you like? What don't you like? Why not? If you don't like something, can you not change that? Why? Why not?
- 16) What are the different dimensions of loss? Is it only livelihood? If yes, explain. If not, what else?
- 17) How did you/your elders/your community respond? Let's talk about this chronologically.
What do you remember about the first time your community protested against the harm that was being done to the wetlands? How did that come about? What triggered it? Who spoke about it? How was a decision taken to challenge it? What exactly did you do? What was the response of the adversaries? Why do you think they did what they did? Did they want to harm the river?
- 18) Name a few key moments in your community's struggle, and let's talk about them. Who, what, when? What was the government's response?

About assertions and prevailing*

- 19) The Ennore struggle has lasted for 30 years. Do you think that is significant? Why? Why not?
- 20) Do you think the struggle has been worth it? Why? Why not?
- 21) Would you have done things differently? If yes, what and why? If not, why not and what do you think was done so well that it warrants no change?
- 22) There have been many setbacks and losses. But do you think there have been any gains arising from your struggle? (Prompt to help think of gains beyond "saving the river" to relationships, dignity, respect, self-respect etc)
- 23) What are the factors that have allowed your community to fight for 30 years? What factors lent to your successes? What relationships have you built? Who has helped? Who has hurt? (Probe here to explore the role of solidarity—dangers and benefits)
- 24) Do you think your struggle has had an impact on mainstream discourse about development, environment, wetlands, fisherfolk's worldview?

About government, development*

- 25) The government has set up a climate mission, wetland mission etc. What do you think of these? What would you do if you were in the government?
- 26) What is good about all the industries and development that the government has brought to this region? What is not good about it? How have you been able to challenge or change what is not good about industries and development? If you have not been able to, then let's talk about why it has been difficult?
- 27) What should development mean? What would your future, your Ennore, your river look like with true development? What would need to happen for such true development to occur?

Interview Guide

Background

Self Introduction

Request permission for audio recording

Reminder about systems of confidentiality and withdrawal

For Academics/Activists (Tamil Nadu's model of development)

1. What is good/bad about Tamil Nadu's post-independence course of development?
2. To what extent has the social justice movement influenced the ethos of the state in Tamil Nadu? TN's social justice model is criticised for favouring middle castes at the expense of Dalits and fishers. How would you respond to that?
3. Over the last 20 years, Tamil Nadu has been a hotbed of protests. How would you explain that? How, if at all, have things changed in terms of agency of historically marginalised communities? Many protests have mobilised state-wide solidarity—what explains that?
4. In the lead-up to the 2021 elections, all political parties—except BJP—had prominently announced environmental initiatives and their support to community struggles against infrastructure/industrial projects. How should one see this? To what extent have grassroots environmental justice politics influenced state politics?

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