Beyond the Mainstream: ***Studying North-East India***
Gender, Environment and Sustainable Development in North-East India
A Multilingual Peer Review Annual Journal
Volume: I, Issue: I, 2026

The "Green" Dispossession: A Feminist Political Ecology of Hydropower Development and Riverine Displacement in Northeast India

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Abstract:

This Indian dream towards becoming a 'Net Zero' economy by 2070 has created a developmental narrative which was constructed by the state that allows for the repurposing of the rivers of north-east India — especially those of Brahmaputra basin and Arunachal Pradesh — as hydraulic capital waiting for a national mobilisation. This paper will draw on a theory that combines David Harvey's accumulation by dispossession, Dianne Rocheleau's Feminist Political Ecology and Foucauldian eco-governmentality in order to critically investigate the social and gendered costs of the repositioning. Based on secondary documentary analysis of the Environmental Impact Assessment report, resettlement policy framework and case specific scholarly literature addressing issues of subaltern dispossession of mega dams in the region, the paper proposes that the mega dam infrastructure in the region functions as a patterned machinery of patriarchal subaltern dispossession. Shows how Environmental Impact Assessments are technologies of state knowledge which render living river systems quantifiable, and systematically deny, erase human-ecological relationships. It also demonstrates that the compensation systems already set up under the NRRP 2007 and LARR Act 2013 are a mirroring documentary exclusion of women that makes them stateless within this bureaucratic form, which this paper calls ‘administrative violence'. The paper simply pleads for an ontological pluralism in the governance of those resources: we need to explicitly name gendered indigenous ecological knowledge and customary

rights to use as legally and epistemologically valid claims in the sustainable development policy space.

Keywords: Feminist Political Ecology, Accumulation by Dispossession, Eco-governmentality, Hydropower Displacement, Administrative Violence.

1 Introduction & Theoretical Framework

1.1 Green Energy Narratives & the Frontier Imagination.

The Indian state's goal of becoming Net Zero by 2030 is a dream come true for India.Net Zero by 2030 is a dream come true for India and the ambition of Indian state.

2070 has created a specific sense of the space of North East India, in which the Brahmaputra basin, the rivers of Arunachal Pradesh have not yet been realised as living ecological structures, but only as reservoirs of hydraulic capital (Baruah, 2012). In the official discourse, this area is being cast as India's "powerhouse" – as much a promise of development as a requirement of geopolitics, in that the areas of large dam projects are close to the disputed Sino-Indian frontier. The Mega projects like Lower Subansiri Hydroelectric Project (2000 MW) and Dibang Multipurpose Project (2880 MW) are seen to play an integral part in the logic between ‘Act East Policy' and ‘Viksit Bharat 2047' and are of utmost importance for green energy transition. This paper argues that this is a legitimating ideology, which creates a systematic unconscious and/or purposeful obfuscation of the coercive dispossession of the indigenous and riverine communities by means of the discourse of ecological modernisation.

1.2 Accumulation by Dispossession in the Neoliberal Moment

The paper seeks to theorise this process drawing mainly from Harvey's (2004) notion of ‘accumulation by dispossession' which is an updating of Marx's category of primitive accumulation to the present day of the neoliberal capitalism. It shows how collective or communal resources, like rivers, forests and community lands, are coerced into private or state capital, via processes that are non-consensual – non-marketization. The presence of the security

forces in dam building sites like Lower Subansiri is an example of the coercion and expropriation as Harvey has termed it (2004) referring to the extraction of local ecological wealth through negotiating, not military suppression of dissent. The benefits going to people, in the form of megawatts sold to the metropolitan electricity grid of Delhi or Mumbai, go to NHPC and other corporate electricity generators, and the social and ecological costs of the loss of ecologic commons remain structurally localised within the communities they are ripped from.

1.3 Feminist Political Ecology and Rooted Networks

This analysis is also informed by Feminist Political Ecology (FPE) which argues that environmental change is a gendered one (Rocheleau et al., 1996. This paper contrasts the "rooted networks" of ecological knowledge and everyday lifestyles of everyday women through which the future of river waters is negotiated, as theorized by Rocheleau et al. (1996), with what this paper calls the masculine engineering imagination that views rivers simply as technical problems, the solution to which lies in hydraulic engineering. Women's exercise of their ecological agency (Agarwal, 1992) is not simply embodied in bodies displaced by submergence, but also in their epistemological and material relationships severed by the process.

Both are complemented by two scholarly viewpoints, contextualizing these dynamics. Baruah's (2005) theorisation of the 'frontier' of Northeast India, as a 'region of resource extraction' where the risk of the subterranean population of the region is seismic and ecological, and where the generated surplus is borne by the main land Indian state, places hydropower development in the ambit of internal colonialism. Moreover, Baviskar's (1995) critique of the notion that Nehru constructed dams as "temples of modern India" shows how developmentist narratives sacralise the concept and make it difficult to question and through this process render opposition politically illegitimate. As a whole, they show that the present surge in hydropower is not an answer to the ecological crisis, but is the green version of it.

2 Eco-Governmentality and the Reductionism of Environmental Impact Assessments

2.1 Technologies of Knowledge: Rendering rivers legible

Even if the Environmental Impact Assessment (EIA) is formally a measure of ecological security and safety, in practice it is a tool used by the state to render rivers technically intelligible and politically controllable. The idea of eco-governmentality, which emerges from a new project of Foucauldian political theory and environmental studies, can be analytically fecund for theorising this function. Using Fourier's (2007) theorisation of governmentality as a process of making the territories and the population "legible" through technologies of specialised knowledge, scholars such as Agrawal (2005) have developed this framework and argued that states make "legible" natures across the classification of sciences in order to extend administrative control over ecological resources and the communities that rely upon them.

In this context, the EIA report is not necessarily a scientific tool, but one of knowledge technology – it transforms a dynamic, living river into a network of measurable data. The rivers of North east India that are vital for supporting riparian agriculture and artisanal fisheries, their seasonal agricultural and religious practices and other valued activities are reduced in EIA documentation to flow measured in 'cusecs', storage volume measured in 'cubic metres' and energy potential measured in 'megawatts' (Luke, 1999). Such mathematical reductionism is not a by-product of the assessment process, it is part and parcel of the assessment process. In fact, EIA methodology is problematic because it removes from view just those dynamic connections that are most socially harmful, namely the benefits of rivers as longitudinal and lateral ecological corridors: ecosystem benefits from the seasonal flow of silt and nutrients, and fish from upstream and downstream watersheds (Baruah, 2012). The consequence is what can be called a "green hegemony," in which the state claims its technocratic evaluation as scientific fact, with the consequence that the resistance of affected communities is dismissed as "anti-developmental" sentiments and not as a claim to an alternative ontology, a legitimate epistemological dissent (Luke 1999; Spivak, 1988).

2.2 Project Critiques: Lower Subansiri and Dibang Multipurpose

The effects of this reductionism can be traced in an empirical way in the secondary literature with respect to specific projects. The EIA of the Lower Subansiri Hydroelectric Project (2,000 MW) has been subject of intensive criticisms by expert committees including Indian Institute of

Technology (IIT), Guwahati and Gauhati University, for failing to model the impact of the Project on the ecology of the floodplain in Assam (Baruah, 2012). The effects of this daily change of water resulting from peaking power generation, on riverine fisheries, the local wetland habitat commonly called beel and the habitat of the endangered Gangetic river dolphin were not adequately evaluated. More important is that the report has grossly underestimated seismic risk in the area designated under Zone V, which represents the most critical seismic zone; and critics are suggesting that the risk assessment has been done subconsciously accommodating the needs of project clearance over the need for due precaution for ecology (Baruah, 2012).

A similar criticism can be advanced in the case of Dibang Multipurpose Project (2,880 MW), where scant attention was paid in the process of giving environmental clearance while this was accelerated. The EIA's methodology on social impact falls short in many respects, such as the inability to sufficiently explain the indigenous community Idu Mishmi's ancestral association with the territory of the Dibang Valley which includes sacred groves, their customary ecology, and intergenerational territorial identity. The replacement of this unquantifiable piece of culture with money doctors and forest regeneration programs is an example of how the eco-governmentality works: what cannot be monetized can be compensated, and hence will not be claimed.

3 The Enclosure of Commons and Gendered Precarity

3.1 Gendered Catastrophe – Enclosing CPRs

The dispossessory logic of large dam infrastructure suffusion is not uniform as far as the social categorizations are concerned in north-east India. Its costs and pressures are unevenly shared with gender being a key parameter, one that is not fully theorised in existing literature on displacement. Feminist Political Ecology, as developed by Rocheleau et al., (1996) gives the conceptual tools to look at the processes behind the loss of Common Pool Resources (CPRs) and to explain why this loss can be thought of as a catastrophe that is experienced as a gendered one, with women whose labour every day reproduces household and community facing the material impacts first-hand.

CPRs in the riverine and forested lands of the Brahmaputra basin span a spectrum of ecological space: unclassified community forests, seasonal riverbanks, wetland systems and jhum fallows outside the purview of the private property law (Nongkynrih, 2014). The lateral waters of the Brahmaputra and its tributaries are the integral part of communities' livelihoods like Mishing and for them, the lateral waters are spaces for foraging, small scale cultivation and collection of wild vegetables, medicinal plants and raw materials from where they are able to make their livelihoods in the form of artisanal production. These commons when contained by hydropower projects, such as project fence, project submergence zones, and project traditional land use limits become lost to the community — in administrative terms, the result is that community land assets have diminished. This accounting effaces the gendered specificity of that loss: overwhelmingly women perform the ecological work that the CPRs rely on, and they have been working with their productive and reproductive capacities that is most fundamentally affected by enclosure (Agarwal, 1992; Rocheleau et al., 1996).

3.2 Distance inflation and the phenomenon of time–poverty

Perhaps the most contentious and practically dire impact of this enclosure is what may be called a time-poverty" that is created by an effect that could also be described as 'distance inflation'. Mega dams have changed the flow of water in the downstream areas like drying up of natural spring, changes in the water table and disturbed seasonal flow of water in the tribariaries courses, where the women in dam affected areas have to carry water and firewood from much further distance (Baruah, 2012). Secondary studies on gender and the development of hydropower generation in this area, reveal that the time spent collecting water due to the depletion of water resources due to dams, is an average of forty-five minutes per day, which adds up to a reorganisation of women's time over weeks and seasons. Beyond physical fatigue, the repercussions also involve time spent gathering being time lost earning income from other livelihood pursuits like handloom weaving and home gardening. Likewise, the burden on domestic labour is also often passed on to children, in the form of children being pulled out of school, to participate in the collection of resources, which is reproducing gendered precarity across generations (Agarwal, 1992).

Epistemic destruction however sometimes historically occurs with displacement. In India, the Northeast region has been home to indigenous communities with longstanding practices of maintaining a unique set of ecological knowledge, including agroforestry systems, traditional seed banks, and knowledge and utilization of natural biodiversity particularly at the margins (Rocheleau et al., 1996) with women taking the primary role of custodians of their local environment. When communities are relocated in a colonization process to standardized settlements and are oriented towards cash-based market economies this intergenerational knowledge becomes separated from an ecological context where it makes sense and is useful. In particular, cash transfer benefits go disproportionately to male recipients, which entails the economic control of males, while the role of women as self-reliant ecological managers has been reduced to a dependent status of domestic labour, a status that is administered out of sight from the perspectives of Forestry and Environment ministries (Menon, 2004; Nongkynrih, 2014). The state's resettlement system can therefore achieve, via formality, a dispossession that can be consistently denied in its re-compensatory discourse.

4: Bureaucratic Erasure — Land Titles and Patriarchal Compensation

4.1 The Documentary Regime: side-by-side with the NRC Framework

Hydropower displacement does not create gendered exclusion merely as a side effect of state policy, nor is it visible merely as an interaction with its general categories, but it is rather engrained in the very categories of state policies. The administrative structure of compensation and resettlement in northeast India follows a logic similar to that of the National Register of Citizens (NRC) in Assam and its verification by means of documentation. In both, the State only takes cognizance of claims which can be substantiated by way of formal and paper records and, in both, the recording of such claims systematically disadvantages women (Menon, 2004). In only the same way that the NRC's emphasis on 'legacy data' (earliest evidence of migration before 1971) rendered stateless women whose migratory experiences were through marriage, the hydropower compensation framework renders resource-less women whose cultivating and maintaining usage of lands and commons stretches back many generations and has not been registered with them individually (Agarwal, 1992). The basic line. No Paper No Existence.

4.2 Administrative violence and the Patrilineal Trap

Administrative violence, a concept in the critical study of the bureaucracy and emphasised in the work of Akhil Gupta (2012), who describes the routine production of poverty in the Indian state via paperwork, is certainly relevant here. For the state, no overt coercion is necessary to achieve dispossession, but rather is provided by the definition of eligibility. According to the conditions laid down for the disbursal of the compensation, those who have a patta — a formal land certificate entered in the land revenue record — can only be considered as Project Affected Persons (PAPs) and thus eligible for monetary redress. Under the Patrilineal Inheritance System of a few major tribes of Arunachal such as Galo, Nyishi the inheritance of immovable property (land, buildings) are reserved for the male child of family. Women's inheritance, if at all recognized, limited to movable property—jewellery, domestic implements and livestock. The end result of this, through the compensation mechanism of the National Rehabilitation and Resettlement Policy (NRRP 2007) and the Land Acquisition, Rehabilitation and Resettlement (LARR) Act of 2013, is predictable—both in terms of fulfilling legal obligations and in terms of its social impact. Check payments are processed for a man (who is by default the head of the family) as the official title holder, while women who have farmed, foraged and eco-managed the same land for decades are considered dependants and have no rights whatsoever (Nongkynrih, 2014).

4.3 Making Livelihoods the Invisible in Compensatory Calculus

What makes this erasure so significant is that women's losses of livelihoods are undervalued even in the calculating of compensation. The NRRP and LARR are both geared toward the restoration of the loss of these documented assets (space, standing properties, recorded cultivation). There is no any provision for the loss of livelihood practices carried out on common lands such as the practices of river bank foraging, wetland fisheries and practices of collecting non-timber forest products from unclassified community forests. Such activities do not produce any formal title, any record of income, and do not become a trace on the bureaucracy of the state; they are effectively exterior to the epistemology of loss that the state has about it, as theorised by Menon (2004) and Spivak (1988). Women's ecological labour, as is indeed the case in Rocheleau

et al. (1996)'s framework, the material foundation of household survival, is also not counted or compensated. Official records are silent to the extent of its disappearance.

Conclusion

As illustrated in the previous sections of the analysis, the Indian state's hydropower programme in Northeast India is hardly a development versus environment's compromise. It is more exactly considered a discursive regime of patriarchal subaltern dispossession that constructs its own legitimacy through the language of the green energy transition to displace indigenous commons, stifle local opposition and to 'manage' women's ecological citizenship out of being (Harvey, 2004). Eco-governmentality creates technically-legible rivers, but illegible in social terms are the communities which are most impacted by rivers (Foucault, 2007; Luke, 1999). Accumulation by dispossession leads to de-centralisation of the ecological surplus from a frontier to a metropole, as well as the centralisation of risk and precarity in the opposite direction (Baruah, 2012; Harvey, 2004). Feminist Political Ecology argues that these could not be considered gender neutral, and that this is the case with Northeast India's is highly supported (Rocheleau et al., 1996).

The above criticism is for a change in policy within the current system, but also one of a more basic ontological pluralism of government in relation to the natural. The path towards true ecological sustainability (as opposed to its technocentric simulacrum) involves several enzymatic shifts to both state institutions: their recognition of customary usage rights by formal title (Nongkynrih, 2014), and their compensation frameworks, to document and address women's livelihood losses across common and riverine space (Agarwal, 1992); and indigenous ecological knowledge (IEK): acknowledging it with epistemic status rather than as a by-product of which must be managed by afforestation schemes and cash packages provided. The erection of Green energy infrastructure on the back of the disposal of people who have their lives most intimately connected with the rivers crisscrossed by these dams is not a means of escape from extractive capitalism, but a form of it with another name (Harvey, 2004).

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