



Economic Growth, Social Divides and Sustainable Development: Making Development Work, Lessons from the Indian Experience

Payal Banerjee^a and Atul Sood^b a. Smith College b. Jawaharlal Nehru University

Paper presented at the UNRISD conference Green Economy and Sustainable Development: Bringing Back the Social Dimension

10-11 October 2011 - Geneva



The **United Nations Research Institute for Social Development (UNRISD)** was established in 1963 as an autonomous space within the UN system for the conduct of policy-relevant, cutting-edge research on social development that is pertinent to the work of the United Nations Secretariat; regional commissions and specialized agencies; and national institutions.

Our mission is to generate knowledge and articulate policy alternatives on contemporary development issues, thereby contributing to the broader goals of the UN system of reducing poverty and inequality, advancing well-being and rights, and creating more democratic and just societies.

UNRISD, Palais des Nations % 1211 Geneva 10, Switzerland

Tel: (41 22) 9173020 Fax: (41 22) 9170650 Email: info@unrisd.org Web: www.unrisd.org

Copyright © United Nations Research Institute for Social Development (UNRISD).

This is not a formal UNRISD publication. The responsibility for opinions expressed in signed studies rests solely with their author(s), and availability on the UNRISD Web site (www.unrisd.org) does not constitute an endorsement by UNRISD of the opinions expressed in them. No publication or distribution of these papers is permitted without the prior authorization of the author(s), except for personal use.

Abstract

This paper offers an overview of the Indian state's alternative or sustainable development trajectories as well as the more mainstream policy decisions for highgrowth objectives in the global economy. Rapid economic growth in India during the last two decades has accentuated the demand for energy and resources related to water, land and forests. Based on a close review of the current policy framework in these areas, this paper offers two central insights: (i) how emerging economies like India have dealt with the question of access to resources in response to the opposing demands of "inclusive growth" and more equitable development aimed at closing social divides; and (ii) the specific case study of two (seemingly) contradictory development trajectories, namely the Green Mission and hydro-electricity power projects and dams on river Teesta in India's North-eastern Himalavan region. A closer reading of the policy framework for water, land, forests and river-dams suggests that current approaches to growth privilege a mainstream development perspective, promote privatization, and aggravate existing social inequalities. Moreover, the so-called green or sustainable development approaches tend to lean towards neoliberal principles, thereby compromising their effectiveness.

Introduction

Taking the instances of glaring extremes between poverty and prosperity across emerging economies in the global south as the point of entry, this paper offers an analytical overview of the Indian state's alternative or sustainable development trajectories as well as the more mainstream policy-decisions for high-growth rates as a key player in the global economy. It also addresses how contemporary Green or sustainable development approaches tend to lean towards neoliberal principles, thereby compromising their effectiveness. Two central insights are offered as the paper's theoretical and substantive contribution: a) how emerging economies like India have responded to the opposing demands of 'inclusive growth' and more equitable development aimed at closing 'social divides'; and b) the specific case study of two (seemingly) contradictory development trajectories, namely the 'Green Mission' and hyrdro-electricity power (HEP) projects and dams on river Teesta in India's northeastern Himalayan region. We suggest that current policy approach privileges a privatized method of development and problem-solving while ignoring and aggravating social inequalities.

The success of high growth of India, in the last decade or more, has been globally recognized. Current estimates suggest that India has grown at an average rate of 7.2 percent per annum between 2000 and 2010, notwithstanding the recession in the global markets. Most of this growth has come from the service sector. Nearly 66 percent of this growth has come from the service sector and it contributes nearly 50 per cent of India's GDP today (author estimates based on GDP series released by Central Statistical Organization, Government of India). This 'success' of GDP has brought with it most intense contestation of natural resources between state, citizens and industry for land, water and forests in the recent years.

The high economic growth of the last two decades has accentuated the growing demand of water across competitive sectors, intensive and extensive extension in agriculture has increased droughts, there is decline of water quality, particularly of groundwater, and unabated flooding, and inter-state river disputes. Availability of safe drinking water is inadequate. Severe water shortages have already led to a growing number of conflicts between users (agriculture, industry, domestic), intra-state and inter-state.¹

Forest use and control in and around India's forests have resulted in a range of conflicts from everyday contestations over forest access between different communities in a village, along with violent encounters between the forest department, police and villagers, and battles that are fought out in the court. Moreover, issues around access and income from forest minerals drive these conflicts. Sundar (2009) provides a typology of forest conflicts that includes "unclear resource boundaries, decreasing resource stock (scarcity), legal pluralism, competing demands, eco-centric concerns, nonaccountable representation/leadership and unwillingness to fulfil environmental obligations on the part of the government or private companies". She concludes by suggesting that the growth thrust and changing climate of investment under neo-liberal

¹ "... growing water conflicts between different users, areas and States (inter-state disputes on sharing of river water) and inequities in distribution of the available water resources are some of the crucial concerns currently faced by the country's water-sector." See *Water Resources Development in India: Critical Issues and Strategic Options*, ADB Report.14. www.adb.org/Documents/Assessments/Water/IND/Water-Assessment.pdf, accessed on 14 September 2011.

policies has given the question of ownership and access rights over land (both agricultural and forest) added urgency.

The land question has also returned to the public gaze in India in the 1990s and more sharply in the last decade. This 'return' has occurred through protest movements, legislative debates, court decisions and judgments, and reports brought to the public by the media. In the 1960s and 1970s land question was at the centre of public debate in India. In the 1970s the question of land, posed by political movements and mobilization, was extreme inequality and deprivation in the remote parts of India, much of which was amongst the *dalits* and *adivasis*, and the source of this deprivation was identified as absence of access to productive assets including land. In the 1990s the land question has come up in a new 'avatar'. With the adoption of neoliberal economic policies in the late 1980s and early 1990s the source of growth is rooted in spread of construction, townships, urban development, IT parks, commercial centres, and other service sector activities. Much of this has happened in and around urban and in the peri-urban centres. The rural economy has experienced very low growth, often negative growth, and the majority of the poor and marginalised in remote rural hinterlands have been dislocated from their land and settlements in search of jobs to these 'new' growth poles in and around the cities. To meet these new growth needs the forest and cultivable land has been opened to mining, construction of new airports, roads, dams, IT parks, cantonments, townships and so on. The land question has now transformed into a question of 'land acquisition', where pricing, compensation, resettlement, and rehabilitation are issues at the centre of the politics around today compared to the notions of acquisition, redistribution and viability of cultivable land in the 1960s and $1970s^2$.

The current trajectory of development has created the divide of social exclusion and the acute need for jobs and livelihoods, as people have undergone massive displacement from forests, land and natural habitats as a result of an aggressive strategy of the iconic ten percent growth-rate. The response of the state, whenever it is forthcoming, to these challenges has been two fold - propose legislative changes and use its coercive apparatus to suppress protests and conflicts. What is of interest to us in this paper is the nature and content of these legislative responses (Acts) and what in essence 'informs' these legislative changes. The section below will provide a broad overview of state policies on water, forest and land.

The Exclusive Inclusiveness: Characterising India's 'Sustainable Growth'

The Story of Water, Forests and Land in India (Jal, Jangal, Zameen³)

ACT 1: In response the challenges of water, Government of India (Indian National Water Resources Council) has adapted a National Water Policy that recognizes that water is a scarce and precious resource and thereby outlines the broad principles that govern the management of the country's water resources. The first National Water Policy was adopted in September of 1987. However, very little was achieved in the fulfillment of the objectives laid down in the first policy. Hence, there was a need to revise the National Water Policy of 1987 and a new policy was thus adopted in 2002

² The recently proposed Land Acquisition Bill of 2011 to the Indian parliament is a proof of this.

³ In Hindustani, Jal is water, Jangal refers to forests, and Zameen means land.

with a few more provisions (Government of India 1987, 2002). The broad goals of the policy are: 1) establish a well-developed information system for water related data at national/state level to ensure appropriate resource planning; 2) effective water resources planning by encouraging non-conventional methods of water use such as in inter-basin water transfers, artificial recharge of aquifers and desalinization of brackish water, as well as traditional water conservation practices like rainwater harvesting and incorporating quantity and quality aspects as well as environmental considerations; 3) develop and manage water resources by reorienting existing institutions and creating new ones wherever necessary; 4) establishing water allocation priorities as: first drinking water, second irrigation, third hydropower, fourth ecology, fifth industries, sixth navigation and then other uses; 5) preserving quality of environment and ecological balance implementing and operating a water resource project; 6) groundwater development; 7) Fixing water charges in such a way that they cover at least the maintenance and operation costs of providing the service initially, and a part of the capital costs subsequently; 7) ensuring treatment of effluents before discharging into natural streams; 8) promoting water conservation consciousness through education, regulation, incentives and disincentives (ADB: 5; Ministry of Water Resources 2010: 6-7). The idea of 'reorienting' institutions and making provision of water economically and financially self sufficient or viable are 'radical' departures compared to provisioning of water based on need or as a basic human necessity and as a human right. The National Water Policy 2002 encourages private sector participation in planning, development and management of water resources project for diverse uses, which might help in generating financial recourses and in introducing corporate management and improving service efficiency and accountability to users. The policy also recommends some incentives to promote public private partnership⁴. The stress on participatory approach in water resources management (e.g., Jal Abhivan Programmes) in the 2002 policy is premised on the belief that participation of beneficiaries will help greatly for the optimal upkeep of irrigation system and utilization of irrigation water. It believes that when water is provided very cheaply or even free of charge by public water utilities, users do not feel the urge to use water as a resource economically.⁵ Also, the policy reflects the belief that competition in provision of public services could improve efficiency in provision of irrigation and water supply services. The policy also promotes establishing water regulation authorities at state level, that would elevate the state role more towards a facilitator and a regulator from the present role of operator and crisis manager.

ACT 2: The Scheduled Tribes and other forest dwellers (Recognition of Rights) Act of 2006 was passed as an "An Act to recognize and vest the forest rights and occupation in forest land in forest dwelling Scheduled Tribes and other traditional forest dwellers who have been residing in such forests for generations but whose rights could not be recorded; to provide for a framework for recording the forest rights so vested and the nature of evidence required for such recognition and vesting in respect of forest land."

⁴ Many policy initiatives in the recent years, like Bharat Nirman, Jawaharlal Nehru National Urban Renewal Mission (JNNURM), NREGP, NRHM are all based on active and participatory role of civil society actors, local representative organisations, government departments and private investors. The Right of Information Act provides a backbone for such policy initiatives. The approach here is that the identification of felt need, accountability of services and transparency in implementation is done by civil-society institutions; the business provides the resources for investment and the government does the coordination and facilitation. On the face of it, the approach looks interesting and appears to be a win-win situation for all. But is it really so? For a critical evaluation of the PPP approach see "Deepening Disparities and Divides: Whose Growth is it Anyway?," Citizens Report on Governance and Development, 2007, page 95-97).

⁵ ADB report criticizes the new policy for not providing any guidance for pricing of water for various uses.

As Bill was initially drafted, the Bill gave the primary power to determine forest rights to the gram sabha or village assembly, invoking for the first time, the use of oral evidence as proof of occupation - doing away with the tyranny of incomplete forest and land records maintained by a rent seeking bureaucracy. After the adoption of this Act several committees have been formed by the Ministry of Environment and Forest, Government of India to examine how the legislative changes are helping in conflict resolution in the forestlands of India. The overall finding of the Committee to evaluate the implementation of the Forest Rights Act of 2006 is that, with notable exceptions, the implementation of the FRA has been poor, and therefore its potential to achieve livelihood security and changes in forest governance along with strengthening of forest conservation, has hardly been achieved (Government of India 2010). The committee on the specific issue of FRA and development projects observes "that a considerable part of India's forests and forest land are being diverted for 'development projects' such as mines, power plants, irrigation, dams, roads, etc. Such forest diversion often leads to displacement of people and adversely affects the livelihoods of forest-dependent communities. Until recently, all such forest diversions were undertaken without any consultation with local communities." The committee further notes that an order of the Government of 2009 (sequel to FRA 2006) in July 2009, however, the MoEF issued an order as a sequel to FRA 2006, specifying that proposals for forest diversion be placed before the concerned Gram Sabhas and their consent to diversion and compensation if any to be obtained, has not been properly integrated and implemented in the FCA or FRA process. Furthermore, this committee visited Orissa and made a very public denouncement about the "non-recognition of forest rights by the Government of Orissa and violation of the Forest Rights Act, in the forest areas proposed to be diverted for the POSCO project, and urged the Ministry of Environment and Forests, Government of India, to withdraw the clearance given to the State Government for diversion of the forest land. The Ministry taking note of the team's observations issued a 'stop work' order on 5 Aug 2010, directing that all work on the land including handing over of the forest and non-forest land should be stopped forthwith, and details furnished to the Ministry'. On 16 August 2010, another committee appointed to look into the forest clearance proposal for bauxite mining in the Niyamgiri hills of Orissa for the Vedanta aluminium project, gave its report, categorically stating that the proposed mining lease in the area should be disallowed because it would deprive tribal people, particularly Primitive Tribal Groups of their forest rights and destroy their lives. The Ministry of Environment and Forests acting on this report disallowed the forest clearance, rendering the mine inoperable.

Interestingly, the spate of committees discussed above and their conclusion about the failure the new legislative process to deliver has so far not compelled a fresh debate in India for either a new legislative regime or about the contradictory dynamics of growth and needs of forest dwellers. It may be useful to mention here that the institutional path often chosen, in the new policy regimes, to deliver rights through methods like Joint Forest Management (JFM), rather than addressing the needs of people, has 'outsourced' some of the conflict to villagers themselves, making them responsible for protecting forests against people from other villages or against disadvantaged users from within the village (headloaders, women etc.). There seems to be some kind of 'outsourcing' of responsibility by the state in the process of seeking 'consent' of people through decentralized institutions.

ACT 3: The Draft National Land Acquisition and Rehabilitation and Resettlement Bill 2011 has been introduced in the Indian parliament recently. The bill focuses on process of land acquisition, compensation for land acquired and R&R process, package and

conditions. The bill disconnects the question of 'who acquires land' with 'why land is acquired'. The Bill facilitates acquiring land, including commons, under the pretext of an unstated public purpose for infrastructure development. This could mean anything in the future, food retails chains of the multinationals, private grain markets or whatever else. In the urban areas the Bill connects land acquisition with real estate development. By parcelling land into smaller pieces the bar of 100 acres may not stop the tide of transfer of land in the hands of land mafia and elites. The Bill perceives land simply as a commodity, whose value is influenced by market processes and principles. 'Economic value' of land and commons, of rivers and ponds could be very different for the tribal's, marginal and small farmers and land developers. There is nothing in the bill at the moment to address such concerns. The Bill proposes to monetizes land as free marketable property, along with already introduced changes in land use patterns, and zoning regulations, in the name of 'growth' and 'market'. Within this new legitimizing principle concepts like rights, justice, equity are no longer useful points of entry.

One might ask what informs these legislations? These three Acts provide an interesting entry into the methods used by the state to resolve the contradictory impulses of growth and sustainability. What the Indian state appears to be looking for is something that does not restrict the propulsion of growth while at the same time provides legitimacy to the ongoing strategy of growth. The legislative changes discussed above, along with some of the new principles of governance like decentralized decision-making, public private partnership, and stakeholder consultations for the Indian state, together provide a defense for 'growth'. The state believes that an adequate response to the widespread discontentment of a population distressed with methods of land acquisition, underemployment, food insecurity, limited benefits of growth, poverty, poor infrastructure in terms of water, public health, sanitation, housing, education and food etc. is to build to highways, bridges, dams, malls, supermarkets, condominiums, gated communities, airports, parks, private cities and so on.⁶ The idea of 'public interest' is also postulated in these in opposition to the interest of the poor, marginalised, Dalit and tribals. We suggest that the idea of 'public interest' has been divested of its former connotation in that it does not have the old fashioned interpretation, over and above the individual interest of citizens (commons); nor does it imply aggregative interests of all those who have stakes in the same resource (needs of construction industry for timber and need of peasants for timber). What 'public interest' today means perhaps is to make natural resources subservient to the principle of profit. Public interest has thus become a euphemism that stands as a proxy for the interests of national and global capital.

Furthermore, democratic decentralization and stakeholder claims have become the institution and process through which this 'public interest' reworks itself. The notion of

⁶ The commoditisation, commercialization of land and alienation from land continues even in the proposed/new legislations that are supposed to address the problem thrown up by commercialization, unfettered industrialization and growth. This is done in the process of land acquisition that does not leave any scope for resistance other than on the issue of compensation. The process begins with notification of the earmarked land by the district magistrate (DM) (Land Acquisition) u/s 4(1) of the Act, without any consultation or negotiation with the landowners. Landowners an opportunity to file their objection against the notification within 30 days u/s 5(1) in some states. This seems pro-people but the law does not permit the owners to object to the acquisition if they do not fall under the categories of objections already defined: the purpose for which land is sought to be acquired is not a public purpose; the land in question is not suitable for the stated purpose; more land is being acquired than what is necessary for the proposed project; an alternative piece of land could be acquired. In all these options there does not seem to be any scope to oppose acquisition on the ground that the land is their only source of livelihood and hence should not be taken away from them at any cost (Kumar 2011: 22).

stakeholder brings all those associated with the resource or making a claim to a resource at par with each other.⁷ The key concern with PPP is whether the efficiency gains in a PPP more than offset the higher private sector borrowing costs, whether PPP can be viewed as substitutes for good governance or good governance is a pre-requisite for the success of PPPs. The experience of PPPs the world over suggests that in lieu of the various types of risks that the private player faces in a PPP (in case of public investment these risks are borne by citizens), the private partner quotes a price.⁸ If the risk were to be over-priced, the cost of service would go up and make PPP unviable and counterproductive. If the risk were to be under-priced, the government would be forced to extend a guarantee to cover the price differential. The government then ends up incurring implicit costs of the guarantee by way of a substantial liability in the long run. The cost of guarantee could turn out to be much more than the price differential that the government was unwilling to pay initially. Citizen's interests are best safeguarded in PPPs that function in competitive environments. In Indian policy making, PPPs are being used as processes to over the difficulties of market led competitive growth.

In this neoliberal phase 'growth' is the legitimizing principle that the state uses to rationalize its actions in comparison to 'social welfare' in the earlier years. The regulatory changes are made to meet this challenge and not the challenges of water scarcity, loss of habitat and livelihood for the forest dwellers or displacement and dislocation of rural poor from their lands. The following part of the paper will further develop this theoretical assessment by taking up a specific case study from India that involves the conceptual incompatibilities between the approaches and goals of what counts as the Green economy and some measure of state-lead collective action to combat climate change one the one hand, and on the other the social and environmental distress inducing construction of over two dozen large-scale hydro power dams on the river Teesta in the northeast Himalayas.

Incongruent Policies and Hierarchies of Power

A Case of Incompatible Analytics Troubling the People and the Politics of the "Green"

This portion of the paper discusses some of contradictions between development policies and policies enshrined under the Green banner by focusing on the Indian state of Sikkim, known for its established environmental initiatives and most specifically its widely known *Green Mission*. A former northeast Himalayan kingdom ruled by the Chhogyal lineage and located in the Northeastern part of India, Sikkim joined the Indian union in 1975. Known for its natural beauty, majestic peaks, forests, excellent climate, Sikkim has become the destination of choice for a large number of domestic and international tourists. Due to the present state government's numerous initiatives, Sikkim is regarded as a model state with significant Green policies at work in various levels, one of the most prominent being the state's Green Mission. Chief Minister Mr. Pawan K. Chamling has been recognized as one of the few Green Chief Ministers in India.

⁷ It is noticeable that on the Ministry of Water Resources web site (www.mowr.gov.in/) of the Government of India, the consultation to review the existing policy with corporate sector precedes its consultations with the representatives of the *Panchayati Raj* institutions.

⁸ Working paper on Public-Private Partnership, Government Guarantees and Financial Risk by the IMF Study Team led by Richard Hemming.

Data and insights on recent environmental issues, Green Mission policies, and Hydro Electric Power (HEP) plants in the Indian state of Sikkim are based on fieldwork conducted during August 2011. This fieldwork included interviews with journalists with expertise in covering environmental issues, local post-graduate university students involved in field research on HEP issues, interns in environment focused NGOs all based in and around the Sikkim state capital city of Gangtok. Interviews were also conducted with activists affiliated with the Affected Citizens of Teesta (ACT), an organization that addresses the social, ecological, and cultural rights of those affected by the dams on river Teesta in Sikkim. The research also included a close review of the state's Green Mission policies outlined in numerous publicly available information booklets and pamphlets issues by the Forests, Environment and Wildlife Management Department of the Government of Sikkim.

"Green Mission" and Hydroelectric Power (HEP) Projects in Sikkim

The state's Green Mission is a multi-pronged strategy undertaken to preserve and promote Sikkim's environmental health and bio-diversity.⁹ The initiative includes: planting of trees, preservation, and conservation work; record keeping on the implementation of *National Aforestation Programme* in the state¹⁰; distribution of car window stickers with Green Mission messages; conception of eco-cities and eco-state; upkeep of trees along major roads and highways; organic agriculture; ban on forest grazing; ban on chemical fertilizers; and, a fairly effective ban on plastic bags in Sikkim.

As part of the Green Mission, numerous eco-tourism initiatives have been adopted. The state has begun to promote village and home-stays for tourists in the place of hotelbased tourism to highlight environmental concerns. The forest department has been instrumental in the printing and distribution of awareness-raising fliers with eco-tips and instructions for tourists, tour guides, and taxi drivers. Sikkim's Green Mission also includes a plan to conserve the state's high-altitude rivers and lakes that witness the arrival of tens of thousands of tourists throughout the year. Here, the state's collaborators in forming lake preservation committees include local residents and members of village Panchayats. The state also works with Indian army personnel posted in camps at some of these lake regions near the border to assist with preservation projects. The state has put up signs and garbage disposal units, funded sanitary toilets, and employed workers to keep lake areas clean. Lakeside vendors have been provided suitable stalls to run their businesses to eliminate random construction and pollution. The state now charges a small fee of Indian rupees 20.00 (roughly 50 cents in US currency) from each tourist at check-posts to fund lake preservation initiatives. Initiatives are in place with schools, where funding is provided for eco-clubs, studentled teams, and activities for eco-awareness campaigns at secondary and senior secondary levels. The Centre for Science and Environment in collaboration with various arms of the Sikkim state government promote these activities and organize teacher training ("Green Teachers"); and, competitions and prizes earmarked for Green Mission related awareness for students are hosted frequently.

⁹ Published materials by the Forest, Environment, and Wildlife Management Department, Government of Sikkim, 2009, combined with interviews with journalists and forest department officials inform this section on Sikkim's "State Green Mission."

¹⁰ See report "Implementation of *National Afforestation Programme* in Sikkim" (State Forest Development Agency 2011).

In tandem with its Green Mission, Sikkim has also has initiated nearly 29 Hydroelectric power projects along with additional smaller ones on the river Teesta with for revenue generation and development. An estimated 37 percent of India's river waters are in the country's Northeastern region (Mahanta 2010). Moreover, the region is also seen as a storehouse for hydroelectric power generation with approximately 41.5 percent of India's total hydroelectric power potential. Needless to say, the northeastern region has thus been labeled India's "future powerhouse" (Menon et al. 2003). Moreover, the Government of India views hydroelectric projects "as the most economic and preferred source of electricity" (GOI, Policy for Hydro Power Development 1998). Given its assessment of the desirability of hydro electricity, the Government of India has identified several "objectives for accelerating the pace of hydro power development" (GOI, Policy for Hydro Power Development 1998). These steps include: ongoing emphasis on hydro power in future Plan Periods and on increasing private investment and partnership among the private sector with the central and state governments. One of the "Policy Instruments" to expedite the development of India's hydro potential thus includes the promotion of project with private investment, i.e., a move towards varying degrees of privatization that we have seen above in terms of policies towards water, forest, and land. This policy framework for including the private sectors is elaborated as follows:

With a view to bring in additional private investment in the hydel sector there would be a greater emphasis to take up schemes through the joint ventures between the PSUs/SEBs and the domestic and foreign private enterprises. The joint venture company will be an independent legal entity to be registered under the Companies Act and would act an independent developer.

To underscore the state's support in this sector, the document goes on to state that: Keeping in view that the achievement [in hydro projects] in the 8th Plan had been dismal, the Government is determined to ensure that no slippage is allowed to occur and the targeted capacity addition in the 9th Plan is achieved in full.... Measures for vigorously starting survey and investigations for new green field sites would also be implemented shortly. In addition, [the] Government is keen to restart and activate the hydro projects which are either languishing for want of funds or are remaining dormant due to unresolved inter-State issues (GOI, National Policy for Hydro Power Development 1998).

While declaring its enthusiastic support for expediting HEP project in the country, the government also takes care to identify certain obstacles in the path of hydroelectricity generation and development, as noted in the following segment:

The constraints which have affected hydro development are technical (difficult investigation, inadequacies in tunneling methods), financial (deficiencies in providing long term financing), tariff related issues and managerial weaknesses (poor contract management). The hydro projects are also affected by geological surprises (especially in the Himalayan region where underground tunneling is required), inaccessibility of the area, problems due to delay in inland acquisition, and resettlement of project affected families, law & order problem in militant infested areas" (GOI, National Policy for Hydro Power Development).

The framing of the obstacles merits further analysis, as it is indicative of the state's general attitude towards issues, events, and people that seem to be coming in the way of

development. The naming of hindrances in the path to development in the language of "geological surprises," "delay in land acquisition," "resettlement of project affected families," and "militant infested areas" reveals an administrative attitude that is overwhelmingly techno-bureaucratic in stance, which simultaneously distances the state both from people's needs and lived experiences *and* from disturbing questions of long-term sustainability of the eco-system.

Dawa Lepcha, the founding member of ACT (Affected Citizens of the Teesta), reinforced the above during an interview for this research. One of the most prominent pro-environment grass-roots activists, Dawa Lepcha had gone on protracted hunger strikes on numerous occasions to protest the construction of dams. He stressed the fact that the political and technocratic elite have used the idea of 'development' as an unquestioned given, as something that is always positive and beyond critique. He said:

"We talk about development, talk about creating revenue through these dams, through the sale of electricity. But without really understanding what development really is, all the inner and deep ramifications of everything we do in the name of development. People just accept development. And we rush into programs, like the dams in a region like Sikkim, high in the mountains that are still growing with such minute ecosystems, without asking whether there is carrying capacity for these 29 big HEP projects and numerous small ones! We are not against development! But what we are saying is that any development project has to be in proportion to the carrying capacity. We need to think of the cumulative impact of these HEP projects and then decide, not rush into things like we have so far. So, if you ask me, I don't really know about the Green Mission, about whether in the long run we can have any tangible impact given what has happened to the riverine ecology due to the dams that exist already and then there are more to come. The river is dry already."

This reveals mainstream development approaches' central contradiction. On one hand, we see the promotion and adoption of a range of Green policies, while on the other, we witness the implementation of development projects that create severe environmental and socio-cultural problems. In the example from Sikkim, we see the incompatible simultaneity of the state's elaborate Green Mission with the extensive hydroelectric power dams on river Teesta.

Problems with Riparian Ecosystems

Fieldwork in Sikkim underscored the extent of environmental degradation and socioeconomic problems associated with the hydroelectric projects in the mountainous state. Interviewees cited a roster of examples and evidence illustrating how the river system and its streams, lakes, waterfalls and springs are drying up from the lack of adequate water. They also referred to the silting and sedimentation on the riverbeds and warned that silting of the dams and subsequent de-silting efforts will cause further environmental damage to the area. The impact on the river-based ecosystem has also been palpable. Teesta river fish have died in thousands as waterbeds dried up from dam construction. Although the HEP companies promised to provide "fish-ladders" and hatcheries so that the fish could continue to swim and migrate upstream, activists and local residents claim that such ladders are ineffective for species of Teesta fish that are used to migrating in flowing water; others claim that the ladders were not constructed in some areas as promised or that fish ladders do not work well in mountainous areas. Moreover, the ladders were found to be too high for the fish to jump. One activist found the idea of creating confined hatcheries for migratory fish quite preposterous. Locals mentioned another casualty of these dams—local butterflies that have dwindled in large numbers as a consequence of damming rivers, concrete construction, and presence of noisy machinery. Although the HEP companies promised to create separate butterfly sanctuaries, local residents pointed out that such efforts have been non-existent: one, companies did not keep their promise of building adequate facilities; and two, butterflies, naturally used to open spaces, cannot be expected to live, much less thrive, in demarcated areas.

Social problems related HEP dam construction

The Teesta dams have severely impacted local residents' physical safety and immediate environment. Here is a brief list: villages have reported wide cracks on the ground; houses got tilted or broken; loss of water from streams for daily use; overall changes in traditional ways of life due to physical changes associated with shifts in the river and streams, dislocation (due to land acquisition), and changes in livelihoods. Land acquisition policies have resulted in legal battles and are at the center of many disputes associated with people's dislocation. Other related consequences have involved the following problems: villagers being cheated from adequate compensation or relocation packages; ineffective monitoring of compensation policies; problems with titles, deeds, and determining ownership of land; disputes within families over land sale, price, and distribution of proceeds from sale of land; people frequently exhausting their income from sale of land within months to become homeless paupers; and, problems with resettling and employing people dislocated by land acquisition for the HEPs. Investors and representatives of HEP companies offered villagers meager compensation, such as toilets, roofs, pigs, or cable TV connection, in exchange of their agreement to sell their land.

Moreover, ACT activists have routinely pointed out that dam-affected people were promised jobs and yet even after the completion of projects, most people remained unemployed. The few jobs that were created were those of porters and drivers at project sites and these jobs ended with the completion of construction. Taken as a whole these issues signal a significant transformation in the political economy at the levels of the family, village, and community and that too in a context where the extent or efficiency of public regulatory framework and monitoring apparatus are weak at best.

The Question of Spiritual/Religious Rights as Human Rights

Sikkim also provides another interesting case study, where activists—both secular and monks from Buddhist orders—have combined forces to protest HEPs on the grounds that the construction of HEPs have severely compromised people's spiritual rights. Lepchas, both within and outside of Sikkim, consider Dzongu in north Sikkim to be a highly spiritual and holy place with certain mountains and streams holding special meaning in everyday lives as well as in special ceremonial rituals. The Dzongu area is an exclusive reserve region for the Lepcha population. Any non-Dzongu resident, including other Lepchas from adjoining districts of Sikkim, require a special permit issued by the Government of Sikkim to enter Dzonzu. Lepchas, in general, identify themselves as part of an ancient but living culture that is closely tied to nature. A sense of association with the environment is thus central to the Lepcha worldview, where people describe themselves as *Mutanchi Rong Cup or* the 'Beloved Children of Mother Nature.'¹¹

Incidentally, in the recent years, some of the HEPs have required land that falls within the Dzongu region or in its surrounding areas. These plans, along with recent land acquisition methods in Dzongu, have resulted in severe agitation and hunger strikes organized by both ACT and prominent monks. In addition to protesting the loss of land and homes, people have also agitated over their loss of key spiritual landmarks in Dzongu. As noted earlier, certain hills, lakes, and forested areas in the area are considered to be the abode of protective deities of the Lepchas and thus replete with spiritual significance. These landmarks have come under attack due to land acquisition, dam construction, blasting, and drying up of rivers and lakes. Consequently, people fear a complete obliteration of cultural and spiritual icons, and by extension, the very essence of Dzongu and Lepcha identity. As a result, Sikkimese activists have mobilized their agitation based on various arguments, including their right to preserve places of spiritual significance.

We witness today the emergence of "Green"—a rapidly expanding cognitive category and lexicon cast as an interventionist shift in paradigm for re-thinking everything from jobs, lifestyle, consumer culture, product branding, celebrity endorsements, tourism, revision of educational curriculum, architecture, urban-planning, corporate social responsibly (CSR), to political parties, policy-making, and civil societies. Many argue that we are at the brink of a new era that provides an opportunity to turn a crisis of planetary proportions into an opportunity for widespread social justice, given the immediate need for a collective, unselfish response to deal with the environmental emergency that is irreverent of national and economic boundaries. Civil societies, grassroots groups, communities, neighborhoods, and citizen-groups are thus being called into action to reorganize life and living in a manner that is, in general terms, sustainable, small-footprint, or carbon-neutral. Inspirational stories about community gardens (in the USA) and the emergence of 'Green products' and non-profits in the media reinforce the significance of individual leadership or small-group action. These civic efforts are indeed commendable and undeniably stand for a measure of collective action.

However, a singular focus on these efforts/approaches, we suggest: (a) valorize a privatized/individualized response to larger economic and environmental problems created, at the core, by social institutions and structures, and in particular mainstream development approaches; (b) deflect attention away from the very institutional and historical forces that have simultaneously produced the inequalities *and* the ecological crisis we witness today; and thus, (c) reinforce a neoliberal attitude towards problemsolving at a time when development/growth policies shaped by neoliberalism have exacerbated further the numerous inequalities along the lines of gender, race, class, and North-South divides, i.e., the root of power structures, elitism and inequalities, and the lack of voice and representation that have landed us in the current problems to begin with.

Conclusion

¹¹ See also, Yishey Doma's *The Legends of the Lepchas: Folk Tales from Sikkim* (2010), Tranquebar Press, New Delhi, India.

Sustainable development has been part of the alternative development discourse in countries like India. Moreover, environmental concerns in developing countries have also been raised by ruling regimes. They have raised environmental issues on behalf of the developing world in global forums, voicing legitimate concerns about the unequal power relations in global forums, neglect of development challenges of the developing world and somewhat 'forced' imposition of the 'developed world's agenda for a green economy' on the developing nations. And yet, these very regimes in their own countries are spearheading macroeconomic reforms that are perpetuating extensive vulnerabilities and inequalities. India epitomises this dualistic dynamics. The nation has seen the recent success of high growth, but with numerous challenges. Issues such as, land acquisition, resettlements of displaced populations, 'balance' between agriculture and industry, lack of diversification of livelihoods and underemployment in rural areas, along with forest rights and development needs to name a few, have become exacerbated.

Vulnerability, deprivation, poverty, and displacement are the most difficult challenges that vast majority of people in Asia, Africa, and Latin America face in contemporary times. These are not new experiences for these continents' citizens, given their nations' historical trajectories through the 19th and 20th centuries. However, something has changed in their midst in the last twenty-five years coinciding with neoliberal economic reforms. The centres of unprecedented prosperity created in close proximity of severely deprived social groups represent a sharp asymmetry in entitlements and access to livelihoods that is distinctly different from these peoples' early post-colonial experiences. In South Asia, India is an example where income and social polarization has multiplied in exponential terms in the last three decades. These trends have coincided with the polarization of the development discourse stretched between two extremes: the dominant policy regimes, which approach development via conventional models of growth; and, the nonmainstream constituency, comprising of those who supposedly speak on behalf of the marginalized, which asks questions such as 'growth for whom' and whether 'this development' mean anything substantial for the vast majority of citizens living in perpetual struggle to meet basic needs.

References

- Kumar, Avinash. 2011. "The Battle for Land: Unaddressed Issues." *Economic and Political Weekly*, Vol xlvi, No. 25, p. 22.
- ADB. 2010. ADB Report.
- Government of India. 1987. National Water Policy. Ministry of Water Resources, New Delhi.
- Government of India. 2002. National Water Policy. Ministry of Water Resources, New Delhi.
- Government of India. 2010. *Manthan: Report by the National Committee on Forest Rights Act.* A joint committee of Ministry of Environment and Forests and Ministry of Tribal Affairs, Government of India, December 2010.
- Government of Sikkim. 2011. Implementation of National Afforestation Programme in Sikkim. State Forest Development Agency, Forest Environment and Wildlife Management Department, Government of Sikkim, January 2011.
- Ministry of Water Resources. 2010. Background Note prepared for consultation meeting with policy makers on review of the National Water Policy, July, pp. 6-7.
- Sundar, Nandini. 2009. Violent Social Conflicts in India's Forests –Society, State and the Market. www.scribd.com/doc/46103035/Violent-Social-Conflicts-in-India-s-Forests.

Appendix 1

Tables

From NHPC Website (www.nhpcindia.com)

Teesta H.E Project, Stage-V

"is one of the six hydropower schemes in a cascade identified on river Teesta in East Sikkim District. The Project headquarter at Singtam is at a distance of 110 kms from nearest airport Bagdogra (Siliguri) and about 90 km from railhead at New Jalpaiguri. It is a run of the river scheme with diurnal storage for peaking during the lean season and will generate 2573 MUs of energy in a 90 per cent dependable year." (www.nhpcindia.com/Projects/english/Scripts/Prj Introduction.aspx?Vid =17).

Features

SALIENT FEATURES	
Location	Distt. East Sikkim in Sikkim
Approach	Nearest Rail Head - New Jalpaiguri, Nearest Airport - Bagdogra.
Capacity	510 MW (3 x 170 MW)
Annual Generation	2573 MUs
Project Cost	Rs.2198.04 Crores (April 99 price level)
Beneficiary States	Bihar, Sikkim, West Bengal, Orissa and DVC
Year of Commissioning/Completion Schedule	2008

TECHNICAL FEATURES

- 96.45 m high concrete gravity dam.
- 9.5 m dia, 17.106 km long Head Race Tunnel (Horse shoe shape)
- 3 Nos., D-shaped 6 m dia 155 m, 165 m, 175 m long Tail Race Tunnels.
- Underground Power House containing 3 units of 170 MW each.

Note: During my fieldwork in August 2011, interviewees addressed their discontent with the ways in which the Teesta Stage V project was executed. Most believed that the NHPC did not keep its promises (employment, environmental safeguards, resettlement etc.).

Lachen Project in North Sikkim

"The Lachen HE Project envisages utilization of the waters of the river Teesta for power generation on a run of river type development, harnessing a head of about 360 m by constructing a dam, at Downstream of confluence of Zemu Chu and Teesta River."

Features	
SALIENT FEATURES	
Location	Near village Zema chu in North Sikkim District of Sikkim
Approach	Nearest Rail Head- New Jalpai Guri (208 Km) Nearest Airport- Bagdogra (210 Km)
Capacity	210 MW (3 x 70 MW).
Annual Generation	866 MUs (in a 90 per cent dependable year)
Project Cost	Rs.1046.93 Crores (June 2003 Price Level)(Subject ot TEC)
Beneficiary States	To be decided
Year of Commissioning/Completion Schedule	5 years from date of Govt. sanction

TECHNICAL FEATURES

Diversion Structure	: 85 m high from deepest foundation level, Concrete Gravity Dam
Water Conductor System	: 6.0m dia 4.5 km long Horseshoe shaped Head Race
Surge Shaft	: 15m dia, 75m high restricted orifice type
Pressure shaft	: 3.75m dia, 415m long Circular shaped bifurcating into three nos. Penstocks
Power house	: Underground, with 3 units of 70 MW each, Vertical Francis Turbine
Tail Race	: 6m dia., 400m long Horseshoe shaped Tail Race Tunnel
Structure	
(Project componer	nts are tentative and may get revised)