The Political Economy of Green Growth in India

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Occasional Paper Five

Social Dimensions of Green Economy and Sustainable Development

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Acronyms

ACT	Affected Citizens of Teesta
FRA	Forest Rights Act
HEP	hydroelectric power
MoEF	Ministry of Environment and Forests
IT	Information technology
PPP	public-private partnership

Summary

This paper offers an overview of the Indian state's alternative or sustainable development trajectories as well as the more mainstream policy decisions for high-growth objectives in the global economy. Rapid economic growth in India during the last two decades has accentuated the demand for energy and natural resources related to water, land and forests. Based on a review of the current policy framework in these areas and data from fieldwork in the northeastern region of India, this paper addresses two inter-related themes: (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 hydroelectric power (HEP) dams on the river Teesta in India's northeastern Himalayan region. Our review of the policy agenda for water, land, forests and river dams suggests that current approaches toward growth have largely privileged a mainstream development perspective, promoted privatization and often aggravated existing social inequalities. The effectiveness of the so-called "green" or sustainable development approaches has largely been compromised due to their mainstream and increasingly neoliberal orientation conceptualized within a primarily techno-bureaucratic policy framework.

Data presented in this paper reveal that communities living within or adjacent to sites of conventional modes of development, such as HEP projects, have experienced displacement, loss of livelihood, social conflict and rapidly depleting natural resources. These socioeconomic and environmental problems have continued to replicate themselves in different parts of India despite a notable presence of the rhetoric of sustainability in policy documents on energy and responsible resource management at the national level.

Following this analysis, the paper proceeds to draw attention to some of the current challenges and questions for policy making that fast-growing developing economies like India face. How do we reconcile the requirements for growth and address increasing social and environmental unsustainability? Is it possible to reconcile the two opposing dimensions within the current growth paradigm? Do we need to search for a new paradigm?

The findings highlight the fact that appropriate policy cannot be formulated unless the question of environmental sustainability is considered and treated simultaneously as integral and fundamental to the institutional contexts behind people's social, economic and material circumstances. Matters of ecology cannot be understood without political economy. Recognizing this is the first step for suggesting specific policy measures in the context of India. Policy makers should therefore seek to connect the following core concerns:

- environmental destruction is not primarily an ethical issue. Ecology of destruction is associated with forms of social and economic reproduction that are not democratically controlled, that are organized indirectly through markets and that are based on self-interested pursuit of profit;

- the relationship between growth strategies and displacement, unemployment, social exclusion, conflict, livelihoods and food security and so on;

- long-term social and environmental sustainability versus short-term economic growth;

- problems that growth periodically encounters cannot be resolved through market mechanisms;

- limits to environmental regulation or legislative interventions and relating implementation gaps in legislation (green or otherwise) with social and economic contexts;

- participatory governance processes and local knowledge versus private sector participation and public-private partnerships; and

- the need to identify and support social, cultural and political mechanisms like collective identities, norms and local contexts.

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Introduction

Taking the glaring extremes between poverty and prosperity across emerging economies in the global south as the point of entry, this paper offers an analytic overview of the Indian state's alternative or sustainable development trajectories and of the more mainstream policy decisions around high growth rates. It also addresses how contemporary green or sustainable development approaches tend to lean toward neoliberal principles, thereby compromising their effectiveness. The two central issues that this paper explores are: (i) to what extent policy frameworks in India are consistent with the stated objective of growth and sustainability; and (ii) how these frameworks play out in specific locations and conjectures.

This paper analyses how emerging economies like India have responded to the opposing demands of inclusive growth and more equitable development aimed at closing social divides, and explores the politics of green growth with a case study of two seemingly contradictory development trajectories: the Green Mission and the hydroelectric power (HEP) projects and dams on the river Teesta in India's northeastern Himalayan region. The findings of this analysis suggest that the current policy approach privileges economic development through privatization and deregulation while ignoring and aggravating social inequalities. The Indian experience tells us how environmental governance is installed that is "compatible" with no limits to growth and how environmental problems are now increasingly "guided" to enable private sector actors to pursue their economic interests in ways which promote sustainability and manage capitalism (Paterson 2008:107). The high growth of the Indian economy over the last decade or more has been globally recognized. Current estimates suggest an average growth rate of 7.2 per cent per annum between 2000 and 2010, notwithstanding the recession in the global markets. Most of this growth, nearly 66 per cent, has come from the service sector, which contributes nearly 50 per cent of India's GDP today.[1] This "success" has brought with it, however, intense contestation over natural resources between state, citizens and industry for land, water and forests in recent years.

The high economic growth has accentuated the demand for water; intensifying and extending agriculture has increased droughts; there is a decline in water quality, particularly of groundwater; unabated flooding; and inter-state river disputes. Availability of safe drinking water is limited. Severe water shortages have already led to a growing number of conflicts between intra- and inter-state users (such as agriculture, industry and domestic users).

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, with battles that are fought out in court. Moreover, issues around access and income from forest minerals drive these conflicts. Sundar (2009:7) provides a typology of forest conflicts that includes "unclear resource boundaries, decreasing resource stock (scarcity), legal pluralism, competing demands, eco-centric concerns, non-accountable representation/leadership and unwillingness to fulfil environmental obligations on the part of the government or private companies". She suggests that the growth thrust and changing climate of investment under neoliberal policies have given the question of land ownership and access added urgency.

The land question has returned to the public gaze in India sharply in the last decade since the 1990s. This has occurred through protest movements, legislative debates, court decisions and judgements, and reports brought to the public by the media. In the 1960s and 1970s, the land issue was at the centre of public debate in India. In the 1970s, political movements and mobilizations were around extreme inequality and deprivation in the remote parts of India, much of which were among the *dalits* and *adivasis*, and the source of this deprivation was identified as absence of access to productive assets including land.

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[1] Author calculations based on the GDP series released by Central Statistical Organization, Government of India.

In the 1990s, the land question has emerged in a new context. With the adoption of neoliberal economic policies in the late 1980s and early 1990s, the source of growth has been rooted in the spread of construction, townships, urban development, IT parks,[2] commercial centres and other service sector activities. Much of this has happened in and around urban and peri-urban centres. The rural economy has experienced very low and often negative growth, and the majority of the poor and marginalized in remote rural hinterlands have been dislocated from their land and settlements to these "new" areas of growth in and around the cities, in search for jobs. To meet these new growth needs, forests and cultivatable land have 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 instead of acquisition, redistribution and viability of cultivable land in the 1960s and 1970s, are the issues that are at the centre of politics today.

The current trajectory of development has created a societal divide and 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 to achieve the iconic 10 per cent growth rate. The response of the state to these challenges has been twofold: 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 next section will provide a broad overview of state policies on water, forests and land.

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

Act 1

In response to the challenges of water scarcity, the Indian National Water Resources Council of the Government of India has adopted a National Water Policy that recognizes that water is a scarce and precious resource and 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 fulfilment of its objectives. Hence, there was a need for revision and a new policy was adopted in 2002 with a few more provisions. The broad goals[3] of the revised policy are to:

i. establish a well-developed information system for water-related data at national/state level to ensure appropriate resource planning;

ii. ensure effective water resource 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;

iii. develop and manage water resources by reorienting existing institutions and creating new ones wherever necessary;

iv. establish water allocation priorities: (1) drinking water, (2) irrigation, (3) HEP, (4) ecology, (5) industries, (6) navigation and then other uses;

v. preserve the quality of the environment and ecological balance by implementing and operating a water resource project;

vi. implement groundwater development;

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[2] IT parks are areas zoned and developed for the use of information technology businesses.

[3] For evaluation of policy goals, see Centre for Science and Environment (2010: 5–7); it criticizes the new policy for not providing any guidance for pricing of water for various uses.

vii. fix 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;

viii. ensure treatment of effluents before discharging into natural streams;

ix. promote water conservation consciousness through education, regulation, incentives and disincentives.

The idea of "reorienting" institutions and making the provision of water economically and financially self-sufficient or viable are radical departures from the provision of water based on need or as a basic human necessity and a human right. The National Water Policy 2002 encourages private sector participation in planning, development and management of water resources projects for diverse uses, which might help in generating financial recourses, introducing corporate management, and improving service efficiency and accountability to users. The policy also recommends some incentives to promote public-private partnerships (PPPs). The stress on participatory approaches in water resources management (for example, Jal Abhiyan programmes) in the 2002 policy is premised on the belief that the participation of beneficiaries will lead to the optimal upkeep of irrigation systems and the utilization of water for irrigation. The policy is based on the understanding that unless users are required to pay for water—rather than getting it very cheaply or even free of charge through public water utilities—they will not value it enough to use it economically. 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 the state level, in order to elevate the state role more toward a facilitator and a regulator from the present role of operator and crisis manager.[4]

Act 2

The Scheduled Tribes and Other Forest Dwellers (Recognition of Rights) Act of 2006 was passed as an Act to protect the rights of Scheduled Tribes and other forest dwellers who have been living in the forests for generations but whose rights have not been recorded, and to provide a framework for recognition of such rights. As the Bill was initially drafted, it 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 (see Government of India 2010a).

After the adoption of this act, several committees have been formed by the Indian Ministry of Environment and Forests (MoEF) to examine how the legislative changes are helping in conflict resolution in the forestlands of India. The overall finding of the committee evaluating the implementation of the Forest Rights Act (FRA) of 2006 is that, with notable exceptions, the implementation of the FRA has been poor, and therefore its potential to achieve livelihood security, changes in forest governance and the strengthening of forest conservation has hardly been achieved. On the specific issue of FRA and development projects, the committee observed:

> 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 (Government of India 2010a:18).

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[4] It is noticeable that on the Ministry of Water Resources website (www.mowr.gov.in/), the consultation to review the existing policy with the corporate sector precedes its consultations with representatives of the Panchayati Raj institutions.

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 [Pohang Iron and Steel Company] 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 5th August 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 (Government of India 2010b:3).

The committee (Government of India 2010b:i) reports that the Ministry of Environment and Forests disallowed the forest clearance for bauxite mining in the Niyamgiri hills of Orissa for the Vedanta aluminium project, rendering the mine inoperable. The justification for disallowing mining lease in the area was based on the idea that it would deprive tribal people, particularly primitive tribal groups, of their forest rights and destroy their lives.

Interestingly, the committees discussed above and their conclusions about the failure of the new legislative process to deliver has so far not compelled a fresh debate in India about a new legislative regime, nor 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 is to deliver rights through methods like Joint Forest Management, rather than addressing the needs of people. This approach 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. 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.[5] The bill focuses on processes of land acquisition, compensation for land acquired and relief and rehabilitation processes, packages and conditions. The bill disconnects the question of "who acquires land?" and "why is land 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: multinational food retail chains, private grain markets, and so on. In urban areas, the bill connects land acquisition with real estate development. By parcelling land into smaller pieces, the bill intends to the set a limit of 100 acres to stop the tide of land transfer into the hands of land mafia and elites. The bill perceives land simply as a commodity, whereby value is influenced by market processes and principles. Yet, the "economic value" of land and commons, of rivers and ponds could be very different for tribal people, marginalized owners, small farmers and land developers. There is nothing in the bill at the moment to address such concerns. The bill proposes to monetize land as free marketable property, along with changes already introduced in land use patterns and zoning regulations. Within this new legitimizing principle, concepts like rights, justice and equity are no longer useful references. In the next section, we address the question: what informs this legislation?

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[5]   The commoditization and commercialization of land, and alienation from land, continues even in the proposed/new legislation that is 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 (Land Acquisition) under Section 4(1) of the act, without any consultation or negotiation with the landowners. Landowners have an opportunity to file their objection against the notification within 30 days under Section 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 which would cause less (or no) inconvenience to people; and the land contains historic monuments, places of public interest, religious buildings, tombs, graveyards, etc, and hence it should not be acquired. In all these options there does not seem to be any scope to oppose acquisition on the grounds that the land is their only source of livelihood and hence should not be taken away from them at any cost (see Kumar 2011).

The Public Interest? The Political Economy of Environmental Regulation

These three acts provide an interesting entry into the methods used by the state to resolve the contradictory goals 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 providing legitimacy. The legislative changes discussed above, along with some of the new principles of governance like decentralized decision making, PPPs and stakeholder consultations, provide a defence of "growth". The state believes that an adequate response to the widespread discontentment of a population distressed by methods of land acquisition, underemployment, food insecurity, limited benefits of growth, poverty, and poor infrastructure in terms of water, public health, sanitation, housing, education and food is to build highways, bridges, dams, malls, supermarkets, condominiums, gated communities, airports, parks, private cities and so on. The idea of "public interest" is also postulated in opposition to the interests of the poor, marginalized, Dalits and tribal people. We suggest that the idea of public interest has been divested of its former connotations in that it does not include either the individual interests of citizens (commons), nor the aggregative interests of all those who have stakes in the same resource (for example, the needs of construction industry and the need of peasants for timber). What public interest means today, 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 process through which this public interest reworks itself. The notion of stakeholder brings all those associated with a resource or making a claim to a resource on a par with each other. Using PPPs as an example of such a process, key concerns include whether the efficiency gains in a PPP more than offset the higher private sector borrowing costs; whether PPPs can be viewed as substitutes for good governance; or whether good governance is a prerequisite for the success of such processes.[6] The Indian experience with PPPs 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. If the risk were to be overpriced, the cost of service would go up and make PPPs unviable and counterproductive. If the risk were to be underpriced, the government would be forced to extend a guarantee to cover the price differential. The government then may end up incurring implicit costs of the guarantee by way of a substantial liability in the long run. The cost of guarantee then can turn out to be much more than the price differential that the government was unwilling to pay in the first place. Citizen's interests are best safeguarded in such processes, which function in competitive environments. However in Indian policy making, PPPs are being used as processes to address the difficulties of market led competitive growth.[7]

In this neoliberal phase, "growth" is the legitimizing principle used by the state to rationalize its actions, in contrast to the "social welfare" stance of earlier years. The regulatory changes are made to meet this challenge rather than the challenges of water scarcity, loss of habitat and livelihood affecting forest dwellers, or the 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 case study from India that reflects the conceptual incompatibilities between the approaches and goals of stated environmental regulation and privatized, corporatized growth. The conflict between state-led collective action to combat climate change on the one hand, and the social and environmental distress in the northeast Himalayas on the other, is clearly evident in this case study.

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[6] See also Hemming (2006).

[7] Jawharlal Nehru Urban Renewal Mission, National Rural Employment Guarantee Programme and National Rural Health Mission are all based on the active and participatory role of civil society actors, local representative organizations, 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 needs, 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 National Social Watch India (2007: 95–97).

Incongruent Policies and the Politics of the "Green"

This section discusses certain contradictions in development policies, especially those conceived under the "green" banner by focusing on the Indian state of Sikkim, recognized for its environmental initiatives and most specifically for its Green Mission. A former independent kingdom ruled by the Chhogyal lineage and located in the northeastern Himalayan region of India, Sikkim joined the Indian union in 1975 as a state. In recent years, Sikkim has become the destination of choice for domestic and international tourists because of its natural beauty, majestic peaks, forests and excellent climate. Moreover, due to the present state government's numerous initiatives, Sikkim is regarded as a model with significant green policies at work at various levels, one of the most prominent being the state's Green Mission.

Data and insights on recent environmental issues, Green Mission policies and HEP plants in the Indian state of Sikkim are based on fieldwork conducted during August 2011.[8] This fieldwork included interviews with journalists with expertise in covering environmental issues, local post-graduate university students involved in field research on HEP issues and environment-focused NGOs, who were all based in and around the Sikkim state capital 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 the river Teesta in Sikkim. The research also included a close review of the state's Green Mission policies as outlined in numerous publicly available information booklets and pamphlets issued by the Forests, Environment and Wildlife Management Department of the Government of Sikkim.

"Green Mission" and hydroelectric power projects in Sikkim

The state's Green Mission is a multipronged strategy undertaken to preserve and promote Sikkim's environmental health and biodiversity.[9] The initiative includes: planting of trees, preservation and conservation work; record-keeping on the implementation of the National Afforestation Programme in the state (see Government of Sikkim 2011); distribution of car window stickers with Green Mission messages; conception of eco-cities and the 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 place of hotel-based 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, local residents collaborate with the members of village *panchayats* to form lake preservation committees. The state also works with Indian army personnel posted in camps at some of the lake regions near the border to assist with preservation projects. The state has erected signs and garbage disposal units, funded sanitary toilets and employed workers to keep lake areas clean. Lakeside vendors have been provided with suitable stalls in order to eliminate random construction and pollution. The state now charges a small fee of Indian rupees 20.00 (roughly 50 US cents) from each tourist at check posts to fund lake preservation initiatives. Initiatives are in place with schools, where funding is provided for eco-clubs, student-led 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, promotes these activities and organizes teacher training (Green Teachers); for

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[8] Banerjee would like to acknowledge the generous support of activist Dawa Lepcha for sharing his experiences with the anti-dam protest movement; Pema Wangchuk, editor of *Sikkim Now!*, professor Satyabrat Sinha, Department of Peace and Conflict Studies and Management, Sikkim University; and activist-researcher Saori Ogura for their insights on the current social and political developments in the region; and Sunil Pradhan for his invaluable assistance with this research.

[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 Green Mission.

example, competitions and prizes earmarked for Green Mission–related awareness by students are hosted frequently.

In tandem with its Green Mission, Sikkim has also has initiated nearly 29 HEP projects along with additional smaller ones on the river Teesta for revenue generation and development. An estimated 37 per cent of India's river waters are in the country's northeastern region (see Mahanta 2010). Moreover, the region is also seen as a storehouse for HEP generation with approximately 41.5 per cent of India's total potential. Needless to say, the northeastern region has thus been labelled India's "future powerhouse" (Menon et al. 2003). Moreover, the Government of India views HEP projects "as the most economic and preferred source of electricity" (Government of India 1998:1).

Given its assessment of the desirability of HEP, the Government of India has identified several "objectives for accelerating the pace of hydro power development" (Government of India 1998:3). These steps include an ongoing emphasis on HEP in future plan periods and on increasing private investment and partnership among the private sector and the central and state governments. One of the policy instruments to expedite the development of India's hydro potential thus includes the promotion of projects with private investment, reflecting the move toward the varying degrees of privatization that we have seen above in terms of policies on water, forests and land. This policy framework for including the private sector is elaborated as follows:

> With a view to bring in additional private investment in the hydel [hydro] sector there would be a greater emphasis to take up schemes through the joint ventures between the PSUs/SEBs [Public Sector Undertaking/State Electricity Boards] 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 (Government of India 1998:16).

To underscore the state's support to this sector, the document goes on to say 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 (Government of India 1998: 3–4).

While declaring its enthusiastic support for expediting HEP projects in the country, the government also takes care to identify certain obstacles in the path of HEP generation and development:

> The constraints which have affected hydro development are technical (difficult investigation, inadequacies in tunnelling 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 tunnelling is required), inaccessibility of the area, problems due to delay in inland acquisition, and resettlement of project affected families, law and order problems in militant infested areas (Government of India 1998:2).

The framing of these obstacles merits further analysis, as it is indicative of the state's general attitude toward issues, events and people that seem to be coming in the way of development. Hindrances in the path to development have been referred to as "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 from people's needs and lived experiences *and* from the more challenging questions of long-term sustainability of the ecosystem.

Dawa Lepcha, one of the most prominent pro-environment grassroots activists and the founding member of ACT, reinforced the above during an interview for this research. Dawa Lepcha had gone on protracted hunger strikes on numerous occasions to protest the construction of dams.[10] He stressed the fact that members of 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 programmes, 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 river's ecology due to the dams that exist already and then there are more to come. The river is dry already (Dawa Lepcha, personal communication, August 2011).

This reveals a central contradiction in mainstream development approaches. On the 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 degradation and socio-cultural problems. In the example of Sikkim, this contradiction can be seen in the state's elaborate Green Mission and the extensive HEP dams on the river Teesta.

Impacts on riparian ecosystems

Fieldwork in Sikkim revealed the extent of environmental degradation and socioeconomic problems associated with HEP projects. Interviewees cited several examples as well as evidence illustrating how the river system and its streams, lakes, waterfalls and springs are drying up from lack of adequate water. They also referred to the silting and sedimentation on the riverbeds and warned that silting of the dams and subsequent desilting efforts will cause further environmental damage to the area. The negative impact on the river-based ecosystem has also been palpable. Teesta river fish have died in the thousands as waterbeds have dried up from dam construction. Although the HEP companies promised to provide "fish ladders" and hatcheries so that 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 impact of these dams—local butterflies have dwindled in large numbers as a consequence of damming rivers, concrete construction and the 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: (i) companies did not keep their promise of building adequate facilities; and (ii) butterflies, naturally used to open spaces, cannot be expected to live, much less thrive, in demarcated areas.

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[10] For more details of this anti-dam activism, see Bunsha 2008.

Social impacts of hydroelectric power dam construction

The Teesta dams have severely impacted on local residents' physical safety and immediate environment. Among other problems, villagers have reported wide cracks in the ground; tilted or broken houses; 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 centre of many disputes associated with dislocation. Other related consequences have involved: villagers being denied 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 dislocated people. Investors and representatives of HEP companies offered villagers meagre compensation, such as toilets, roofs, pigs or cable TV connection, in exchange for 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 individual projects, most people remained unemployed. The few jobs that were created were those of porters and drivers at project sites and these job prospects ended with the completion of construction. Taken as a whole, these issues signal a significant transformation in the local political economy at the levels of the family, village and community, all in a context where the public regulatory framework and monitoring apparatus are weak or absent.

Cultural rights as human rights

Sikkim also provides an interesting case study in which activists—representing ordinary citizens and ordained Buddhist monks from various monasteries—have combined forces to protest against HEP projects on the grounds that the construction of HEP projects have severely compromised people's cultural rights. Incidentally, some of the HEP projects have required land that falls within the Dzongu region or in its surrounding areas. The Dzongu area in North Sikkim is an exclusive reserve region for the Lepcha people. Any non-Dzongu resident, including other Lepchas from adjoining districts of Sikkim, require a special permit issued by the Government of Sikkim to enter Dzongu. Lepchas, both within and outside of Sikkim, consider Dzongu to be a highly sacred place with certain mountains and streams holding special meaning in everyday life as well as in special ceremonial rituals. Moreover, the Lepchas also 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 world view, where people describe themselves as *Mutanchi Rong Cup* or the "Beloved Children of Mother Nature" (see Doma 2010).

The HEP plans in North Sikkim, 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 Dzongu are considered to be the abode of protective deities of the Lepchas and thus endowed with spiritual significance. These landmarks have now 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 cultural significance.

Conclusion

Sustainable development has been part of the alternative development discourse in response to mainstream growth approaches 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 developing nations. And yet, these very regimes in their own countries are spearheading macroeconomic reforms that are perpetuating extensive vulnerabilities and inequalities. India epitomizes these dual dynamics. The nation has seen the recent success of high growth, but with numerous challenges. Issues such as land acquisition, resettlement of displaced populations, finding a "balance" between agriculture and industry, lack of diversification of livelihoods and underemployment in rural areas, along with forest rights and development needs, to name just a few, have become exacerbated.

Vulnerability, deprivation, poverty and displacement are the most difficult challenges that the 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 nineteenth and twentieth centuries. However, something has changed in their midst in the last 25 years coinciding with neoliberal economic reforms. The centres of unprecedented prosperity created in close proximity to severely deprived social groups represent a sharp asymmetry in entitlements and access to livelihoods that are 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 non-mainstream constituency, comprising those who supposedly speak on behalf of the marginalized, which asks questions such as "growth for whom?" and whether "this development" means anything substantial for the vast majority of citizens living in perpetual struggle to meet basic needs.

Following this analysis based on combining fieldwork with a close reading of the policy framework, the paper draws attention to some of the current challenges and questions for policy making that fast-growing developing economies like India face. These include: how do we reconcile the requirements for growth and address increasing social and environmental unsustainability? Is it possible to reconcile the two opposing dimensions within the current growth paradigm? Do we need to search for a new paradigm?

The findings highlight the fact that appropriate policy cannot be formulated unless the question of environmental sustainability is considered and treated simultaneously as integral and fundamental to the institutional contexts behind people's social, economic and material circumstances. Matters of ecology cannot be understood without political economy. Recognizing this is the first step for suggesting specific policy measures in the context of India. Policy makers should therefore seek to connect the following core concerns:

- environmental destruction is not primarily an ethical issue. Ecology of destruction is associated with forms of social and economic reproduction that are not democratically controlled, that are organized indirectly through markets and that are based on self-interested pursuits of profit;
- the relationship between growth strategies and displacement, unemployment, social exclusion, conflict, livelihoods and food security and so on;
- long-term social and environmental sustainability versus short-term economic growth;
- problems that growth periodically encounters cannot be resolved through market mechanisms;
- limits to environmental regulation or legislative interventions and relating implementation gaps in legislation (green or otherwise) with social and economic contexts;

- participatory governance processes and local knowledge versus private sector participation and PPPs; and

- the need to identify and support social, cultural and political mechanisms like collective identities, common norms and modes of calculation and cultural contexts that decrease the intensity of competition and identify the limits of conventional models of growth.

Bibliography

Bunsha, Dionne. 2008. "Teesta's Tears." *Frontline*, Vol. 25, No. 12.
http://hindu.com/fline/fl2512/stories/20080620251209500.htm, accessed on 9 September
2011.

Centre for Science and Environment 2010. *Background Note for Consultation Meeting with Policy
Makers on Review of National Water Policy.* Ministry of Water Resources.
www.cseindia.org/userfiles/background_note_revision_NWP.pdf, accessed on 28 March 2012.

Doma, Yishey. 2010. *The Legends of the Lepchas: Folk Tales from Sikkim.* Tranquebar Press, New
Delhi.

Government of India. 2010a. *Manthan Report: National Committee on Forest Rights Act.* A Joint
Committee of Ministry of Environment and Forests and Ministry of Tribal Affairs, Government of
India, New Delhi.

———. 2010b. *Report of the Committee Constituted to Investigate into the Proposal Submitted by
POSCO India Pvt. Limited for Establishment of an Integrated Steel Plant and Captive Port in
Jagatsinghpur District, Orissa*. Ministry of Environment and Forests, Government of India, New
Delhi. http://moef.nic.in/downloads/public-information/report-committee-posco.pdf, accessed
on 30 September 2011.

———. 1998. *Policy for Hydro Power Development 1998*.
www.nhpcindia.com/writereaddata/English/PDF/hydro-policy.pdf, accessed on 9 September
2011.

———. Various Years. *GDP Estimates*. Central Statistical Organization. www.mospi.nic.in, accessed
on 28 March 2012.

Government of Sikkim. 2011. *National Afforestation Programme in Sikkim*. The State Forest
Development Agency, Forest Environment and Wildlife Management Department, Gangtok,
Sikkim.

Hemming, Richard. 2006. "Public-private partnerships". Paper presented at the high-level seminar,
Realizing the Potential for Profitable Investment in Africa, organized by the IMF Institute and
the Joint Africa Institute Tunis, Tunisia, 28 February-1 March 2006.

Kumar, Avinash. 2011. "The battle for land: Unaddressed issues." *Economic and Political Weekly*,
Vol. xlvi, No. 25, pp. 22.

Mahanta, Chandan. 2010. "India's north east and hydropower development: Future security
challenges." *South Asian Survey*, Vol. 17, No. 1, pp. 131–146.

Menon, Manju, Neeraj Vagholikar, Kanchi Kohli and Ashish Fernandes. 2003. "Large dams in the
northeast: A bright future?" *The Ecologist Asia*, Vol. 11, No. 1, pp. 3–8.

National Social Watch India. 2007. *Citizens Report on Governance and Development 2007*. Sage
Publications, New Delhi.

Paterson, Mathew. 2008. "Global governance for sustainable capitalism?" In Neil Adger and Andrew
Jordan (eds.), *Governing Sustainability*. Cambridge University Press, London.

Sundar, Nandini. 2009. V*iolent Social Conflicts in India's Forests – Society, State and the Market*.
Paper presented at the Conference on Indian Forestry: Key Trends and Challenges 5–6 March
2009, New Delhi. www.scribd.com/doc/46103035/Violent-Social-Conflicts-in-India-s-Forests,
accessed on 30 September 2011.

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