



Modes of governance in India's hydropower development

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This paper takes a qualitative, context-specific approach to governance in hydropower development in India by identifying and describing three modes that are important to planning and operations in this sector. Attention is given to the role of documents and citizen actions in the courts, expanding the coverage of water informality in India. Rent-seeking is also identified as a mode of governance. This qualitative examination draws from policy and official documents, testimonies, and citizen-justice interactions to shed light on cultural practices and rules that are opaque to the outsider. Analysis of the interplay of these modes of governance forms a deeper understanding of the human dimensions of hydroclimatic challenges across the Himalayas. © 2016 Wiley Periodicals, Inc.

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INTRODUCTION

Governance is like a 'total social fact' in the Maussian sense. As Marcel Mauss¹ defined it, a total social fact is 'an activity that has implications throughout society, in the economic, legal, political, and religious spheres' (Ref 1, pp. 76–77). Likewise, governance may encompass or involve every aspect of decision-making and authority if such activity is important to the functioning of the nation state. It is therefore difficult to draw a boundary around what is considered governance and what is not. Instead, the need is to point out the key interactions, drivers, and processes that matter most in a particular setting.

This paper attempts to engage a context-specific approach by highlighting and analyzing three modes of governance that are important to the operation of hydropower development in India. The paper uses examples from the northeastern region of the country, but the decision-making practices the paper describes reflect water, and specifically river, governance across the Himalayan region. Here, the demarcation of three modes builds on the broader argument that resource governance is multifaceted

and incorporates heterogeneous governmental, non-governmental, and citizen rules, norms, and practices, in cooperation or contestation and operation or suspension.² This inquiry into governance also finds important nation-state functions in citizen actions in the courts. These activities have a unique history in Indian public interest litigation³ but are somewhat neglected in accounts of urban water informality.⁴

The paper lays out three modes of governance through the discussion of several cases involving hydropower planning or development. The three modes of governance are defined as (1) documents as gatekeepers, (2) rent-seeking, and (3) citizen input. Each section of the paper will highlight one mode and make mention of the connection between this mode and the other two. The first section of the paper introduces the zeal for hydropower development and looks at the role of documents, and specifically memorandum of understandings (MoUs) and clearances, in preconstruction project activity. This forms a mode of governance that shapes developments from the planning phase through operation of a facility. The second section of the paper specifically considers rent-seeking, that is, seeking illegal income from a bureaucratic position or placement in a set of networks, as a prominent governance mode that prevails in all phases of development. In this section, quotes from the recent writings and public statements and speeches of several high-ranking government officials make visible the more opaque transactions of planning and construction practices. These excerpts

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provide an insider's view of the document trading that is alleged in the media and generally known and discussed in third party accounts. In some instances, these activities appear culturally acceptable in the midst of scant evidentiary representation. The third section of the paper summarizes citizen input as governance by exploring the activities related to one hydropower project under investigation in the National Green Tribunal (NGT). The case illustrates how citizens confront the activities of government and business and check their powers through litigation.

This qualitative examination of materials covers policy and official documents, testimonies, and citizen-justice interactions to shed light on cultural practices and rules that are otherwise opaque to the outsider. In these cases, documents are produced and exchanged along pathways. Documents may be formalistic but without enforcement power. The manner of their production and exchange may be culturally acceptable but illegal or immoral. The researcher must probe a variety of accounts, materials, and sources to understand the interplay of these modes of governance in the field of hydropower. It is the dynamic interplay or involvement of all three modes that gives sense to the water and energy developments occurring across the Himalayas.

The Northeast refers to the contiguous seven states that form India's northeastern borders with China, Myanmar, and Bangladesh, and also includes the state of Sikkim which lies to the west of Bhutan and to the east of Nepal. The tributaries and main streams of the Brahmaputra river system run from the mountainous regions of Tibet and Bhutan and from the Indian states of Sikkim and Arunachal Pradesh to the plains of West Bengal and Assam and eventually to the vast delta of Bangladesh and into the Bay of Bengal. Some of the most important invasive and contested large-scale activities are water projects that generate hydroelectric energy and create reservoirs to store or channel water for urban demands, irrigation, and flood control.^{5–10} The road and bridge constructions that facilitate these river water projects also create infrastructural, ecological, and hydrological complications. In Arunachal Pradesh, hydropower development is also a direct response to construction on upstream tributaries in Tibet. Dams on both sides of the Line of Actual Control affirm each nation's territorial claims and water agendas.^{11–13}

MODE 1: DOCUMENTS AS GATEKEEPERS

The first mode of governance is expressed through the production and circulation of MoUs and clearances in

the state of Arunachal Pradesh in Northeast India. In the current iteration of energy exceptionalism,¹⁴ the state has been pushing for expeditious clearances for hydropower projects, and in response citizens have been monitoring these activities, critiquing key documents, and assessing through field studies. In this context, documents become gatekeepers and mark entry into progressively wider circles of sociality and alliance, and collectively and in interaction, shape large-scale water and energy projects. The outward appearance of this document production and exchange is that it tangles up compliance and non-compliance behaviors connected to environment and forest protocols, policies, regulations, and laws, creating a kind of policy 'meshwork' like the entanglements of formal and informal described by Ranganathan⁴ and Schwartz et al.¹⁵ This notion of document exchange provides another way to look at meshworks and urban water informality by focusing on the production and procurement of important documents and what they mean for social, ecological, and hydrological order. This focus contributes to the idea that policies are created through multiple processes and compliance and implementation of these policies may be highly variable. Roy created an inverted notion of informality to argue that official, unofficial, and everyday practices all involve unauthorized or illicit economic practices that lie outside the formal, legitimate sphere. She noted that the absence of land titles, the existence of fuzzy boundaries and incomplete maps, and the vagueness of policies were 'the basis of state authority and serve as modes of sovereignty and discipline.'¹⁶ Looking at two kinds of documents in contested production and circulation, this section will describe how documents, in addition to creating and maintaining fuzzy and incomplete representations, act as gatekeepers. They open doors and legitimize a category of behaviors and resource uses.

Following Hull's approach¹⁷ to documents in Pakistan's bureaucracy, this analysis also considers the forms, aesthetics, functions, and social associations inhering in and provoked by documents. An 'MoU' is different from a 'parchi' or 'chit' in Pakistan's bureaucracy, as it is different from the 'clearance' that a public or private company must acquire from the Ministry of Environment, Forests and Climate Change to begin construction. In the past, companies could start construction after obtaining a MoU and before collecting the necessary environment and forest clearances. But in the past 5 years, citizen push through the courts and NGT has made the clearance a gatekeeper document that must be obtained after the MoU. Construction

cannot legally start before obtaining these environmental clearances (ECs).

Officially, a MoU or memorandum of understanding (also called MoA or memorandum of agreement) establishes the early phase of a project agreement between a state entity and a public or private sector company.^{18,19} It is usually an agreement between a top-ranking central or state administrative officer and a public or private company. The outer rationalization of a MoU is its status as an allotment; it secures an exclusive deal and allows a company to apply for environment and forest clearances that permit altering or consuming a resource, such as a river or forest. These MoUs or MoA documents are not static indexes but gatekeepers that allow one to initiate feasibility studies and detailed project reports and collect other documents needed to obtain environment and forest clearances. The metaphor of gatekeeping can steer understanding toward the importance of specific moments of power, when a gate is passed through and a new dispensation begins to emerge.

Both documents are indexes for partnerships and productive capacities. While MoUs open doors to new relationships and privileges for a company, environment, and forest clearances allow for broad categories of resource uses that can transform river and terrestrial systems. In the clearance process, when actions are legitimized as categories rather than specific notations, resource uses can be extensive. For example, this occurs when obstructions, diversions, tunneling, and reservoirs are constructed and created and begin to alter forest or river systems and their ecosystem services.^{20–22} These clearances permit large-scale water changes in 'eco-fragile regions'; they also prompt resistance or demands for reformulation from scientists, citizens, and court justices.

Citizens respond and critique these documents through the NGT, a court set-up in 2012 to hear environment-related cases and ease the load on the Supreme Court. Through the case hearings and orders, individuals and groups are able to monitor infrastructure and present their findings to the court and to the larger public through the public domain databases of the NGT and other legal publications. Citizen views and their pleas are expressed through writ petitions and the legal and scientific documentation presented in their petitions and during hearings. The NGT also adds another layer to this documentation when justices appoint committees to investigate the problems raised by the petitioner and identified through the hearings. For example, a committee might be required by the court to monitor how rapidly changing river flows behave with dam barrages,

tunnels, and debris sites.^{23–25} Over the time period that the case is heard by the bench, a number of documents will be generated and interpretations of those documents will be offered by the petitioner, the respondents, and others called to testify in a hearing. This documentation and interpretation creates layers of meaning in official rationalities and fills out the ecological, hydrological, and forest histories informing larger debates and a range of policies. Citizen petitions and related documents such as appeals and rejoinders push the justices to add policy statements in places where erasures or gaps have been. The appointment of citizens to committees formed by the justices to delve deeper into a matter also become opportunities for nonstate actors to engage more directly with policymaking.

These MoUs and clearances have different monetary values and their overt and covert costs can be enhanced through speculation and gaming. These MoUs are part of a gaming system that uses documents as assets that can embolden the public image of a company. Additionally, the acquisition of MoUs and environment and forest clearances reproduces the deep structure of rent-seeking practices in the Indian bureaucracy, a subject the paper will discuss in greater detail in the second section.

Documents in this kind of multilayered meshwork directly shape or reflect infrastructures. The focus on infrastructure as materiality has now caught hold in anthropology and social science more generally, with studies on physical networks,²⁶ megaprojects,²⁷ energy grids,²⁸ and waste and sanitation,^{29,30} leading the field of inquiry. The engineering of river systems to meet energy, agriculture, and urban needs requires a complicated network of barrages, weirs, dams, tunnels, canals, pumping stations, and treatment facilities and all these components constitute a messy and high-maintenance infrastructure that leaks, breaks down, or powers off.^{31–34} Infrastructures are composed of nonhuman elements or material actants that exert their force on eco-politics^{35,36}; they may be manipulated through the politics of ignorance.³¹ Generally they become unsteady accretions, produced through a multiplicity of historical forms and technopolitical relations that, while linked together, seldom fully cohere.³⁷ Infrastructure may be a political terrain for the negotiation of civic virtue and citizenship.^{38,39}

Infrastructures developed from clearances are also subjected to the winds of change in government and private sector financing. When governments are short of funds or face bankruptcy situations, infrastructures are stressed, and in these stressed conditions, may become precarious. Their precarity may

turn dangerous when facilities are operated or fail to function properly. In an institutional climate of rent-seeking, infrastructures may be threatened further. State agents may use document creation and gaming to extract revenue and value—including symbolic capital—from public infrastructure in ways that benefit themselves and their parties. To limit these uses, nonstate actors produce documents that fill out the inchoate spaces of ecological and hydrological histories. They use constitutional rights and principles to counter policy unwriting, undone science,⁴⁰ and erasure, three processes that will become evident in the third section of this paper. The court may delay issuing clearances and require additional study and assessment before reinstating them. It may call for committees to gather and analyze data, and report their findings. All these actions may stall project construction. These steps in deliberation along with financially related delays and problems mean that some Himalayan landscapes are littered with half built projects. Along with this, the foundational infrastructure in terms of roads, transmission lines, and communications is often too underdeveloped to make large-scale projects feasible.

There is very little counterfeit in MoUs or ECs, but there are long disputes on time validity, prescriptions, and resource applicability; and citizen objections are filtered through the courts. In addition, since the rationalizations for clearances tend to lack evidence-based verification, there are long debates about assessments of ecological and hydrological costs and land use changes. These are spoken in terms of hectares of forestland, cumecs, or cusecs of water, e-flows, protocols for muck disposal, and measures for erosion control. These MoUs and clearances build coalitions, since as official legal documents they are assurances for many other financial transactions, subsidies, and services. All these benefits mean that significant rents are paid to obtain these documents.

A MoU also becomes a sign of company acquisition and progress in its life after issue; it can boast about a company's edge and boost shareholder confidence. In theory, the MoU signals the next step, that of obtaining clearances. But, it can also function independently as a projection of success, at a time when the company has no immediate intention to move to the next stage.

MoUs in Arunachal Pradesh

The MoU virus that occurred in the state of Arunachal Pradesh provides an interesting example. The hydropower potential of India's northeast is

concentrated in two states, Sikkim and Arunachal Pradesh. In 2001, the Central Electricity Authority (CEA) envisioned the possibility of constructing 168 large hydroelectric projects in the Brahmaputra basin to generate over 63,000 MW of energy in the northeastern corner of India. When in 2008 the state government wrested the power away from the CEA by writing its own MoUs with private power companies, the allotting of MoUs for projects took off. In 2013, the number of MoUs reached 153, and critics then called this an 'MoU virus'⁴¹. NGOs had long been watching developments and warning about this corruption and misuse of government powers. The public learned through *The Economic Times* expose, *Hydelgate*, in 2013. This expose summarized the transactions occurring in the first stage of hydropower development:

'Brokers and fixers made money by connecting companies with state officials and politicians, who acquired new muscle overnight. Alleges Tapir Gao, state convenor of the BJP: 'Unofficial payments made to the Congress ranged between Rs 10–15 lakh per MW. 'During that signing spree, Arunachal added 39,000 MW. Current and aspiring MPs and MLAs began lobbying for hydel projects to be allowed in their constituencies.'⁴²

In 2010, the media reported that the allotted projects reached 130 in Arunachal Pradesh; by March 2013, 153 allotments had been made on eight rivers in the state. The media reports were corroborated over time by the Chief Minister, the state MLAs, and bureaucrats themselves as they confessed to the schemes in public and private conversations.

By early 2013, one dam had been completed, and three were under construction. The other 153 projects were languishing for lack of equity investment or were being held by the initial 'allottees' until such time as the rights could be sold to another company for profit. In some cases, the companies who purchased these rights were not in a position to carry through with the clearances, permits, feasibility studies, DPRs, and construction and operation of projects.⁴³ An investment in a 2000 MW project, for instance, requires equity of 5000–6000 crore rupees (one crore equals ten million). As one interviewee noted to *The Economic Times*, hydropower projects take some 6–10 years for completion and 50% of the time goes into obtaining regulatory licenses and permits. One company claimed it usually got into projects in the second phase after permits and licenses were in place. One company representative noted most buyers come in to the picture after a project is constructed. Another consultant remarked, 'Companies are making one investment—DPR (detailed project report) or land

acquisition or something—and then trying to sell to the next player...the long term game is getting too unpredictable.⁴⁴

These examples from Arunachal Pradesh show that MoAs or MoUs are gatekeeper documents that require other, unrecorded exchanges that are generally less visible to the average citizen, yet knowable through anecdote and occasional police raids on hidden assets. Bussell^{45,46} shows that rent-seeking has been unevenly practiced across the Indian bureaucracy, with some departments showing more interest than others. The interest is usually predicated upon the ability to wield influence and especially from a specific position in the bureaucratic structure. ‘Octroi’ positions are the plum posts; they are the nodes in overlapping networks that situate the bureaucrat along a path or within a transit zone. These nodes place one at the center of legitimizing practices of document production. From a nodal position in overlapping networks, the bureaucrat can access a number of relationships across networks. In these practices, the nodal officer sits at the tollbooth of production, requiring a fee to produce the document that allows entrance to the next phase. As Hull explains for Pakistan, ‘It is not so much that documents move through regimes of value, in and out of commodity phases, but that they are at once a thing paid for and an object of bureaucratic practice, mediators of practices that are at once bureaucratic work and a paid service’ (Ref 17, p. 58). Certainly top administration officials occupy octroi positions. In these positions, they are able to set up or control key decisions and contracts and acquire illicit earnings passed through the administrative hierarchy.

While MoUs become mediators of monetary exchanges between government and industry, clearances are shaped by a more diffuse and heterogeneous set of bureaucratic practices. In these, rent-seeking occurs at different intensities and scales between government departments and between those and industrial and financial actors. Rents move slowly across departments and up and down the political hierarchy over a longer period. As committees are constituted, diluted, and reconstituted through the processes of policymaking and court interventions, rents are continually established in the push to get projects documented. The next section will look more closely at clearances.

MODE 2: RENT-SEEKING AS A GOVERNANCE MODE

This section extends the discussion on documents by characterizing rent-seeking as a mode of governance

rather than a set of aberrant practices. It is a key methodology in the operations of water informality. Moreover rent-seeking is a critical part of the economy of the nation state. Rent-seeking is a *de facto* set of rules and practices that remains undocumented in official policy. The contradictions between official rules and rent-seeking practices are felt and experienced by citizens and government officials in myriad ways. Rent-seeking is illegal and therefore unregulated. But it is well-known, culturally acceptable and even acceptably immoral. To understand how such contradictions can become an established part of culture, we need to explore the testimonies of a few bureaucrats and administrators. This will provide some qualitative description for activities that are not officially documented but widely known as the subtext for many decisions and agreements.

The first set of ideas is drawn from the memoir of a senior administration official who recounts activities across a number of Indian government departments. In his book, he comically reflects on the ‘char-sau-bees’ (or 420) practices of corruption that have become culturally acceptable over the past 20 years. That individual’s official report, produced 10 years after the memoir, is also instructive. In this section of the paper, a second set of comments is also examined. These are drawn from a dialogue recorded by the media. In this, the Minister of Environment, Forests and Climate Change reflects on the nature of clearances. These reflections underscore the prevalence of cultural narratives and practices that are considered acceptable. They are even admissible yet illegal. Because they are illegal they are off the books and less visible, manifested cleverly through the vagaries of powerful people. The testimonies of these senior officials draw out the underbelly of infrastructural practices.

Here, it is important to return to the lens of urban water informality introduced in the introductory section. Ranganathan (Ref 4, p. 3) employed this lens when defining urban water informality as the uneven application or suspension of laws, rules, and official procedures in the governance of urban space and water infrastructure. These practices of informality would include state activities and actors and nonstate activities and actors all holding a degree of ‘public authority.’ She defines public authority as a form of authority—a power to act over resources and decisions that is legitimized and recognized—that is practiced across groups and professions. It is not in the exclusive domain of government but is nonetheless inseparable from what is imagined as ‘the state.’ In other words, public authority implies ‘stateness,’ but does not rest solely with formal state institutions (Ref 4, p. 2). She also argues that analysis should

avoid conceptualizing these practices of authority as isolated sectors. Following Schwartz et al.,¹⁵ she argues that they constitute a ‘meshwork.’ Taken this way, these practices show that multiple sets of rules and practices are intersecting to constitute another mode of governance. Some practices are legitimized by official rules and procedures while others are illegal but culturally legitimate. These practices may also be religiously immoral. The intentional vagueness in articulating and implementing official rules and procedures helps to keep the circle of evidence-based knowledge small, wherein knowledge of the details of projects and rents is limited to a small network of people. When fewer people know where the money is, then resources and profits can be easily directed to personal or party coffers.⁴⁷ With few details on projects in the public domain, it becomes harder for citizens to oppose them. In this way, the NGT assists by encouraging data collection and new layers of evidence-based verification of conditions and impacts.

Rent-seeking is deeply embedded in the structure of institutional culture. It must be considered an important part of the financial economy that links public and private sectors. Cycles of finance and debt interlace policy and project deals as chronic state debt renders public sector infrastructure unsustainable and then dangerous when components break down and are not fully repaired or remade. Austerity policies aligned with the goal of repaying state debt lead to an intensified extraction of value from public infrastructures. Cycles of state debt and austerity policies also impoverish the pay scale of government workers who create rent-seeking activities out of their decision-making authorities and responsibilities, further debilitating the quality and long-term viability of infrastructure. T.S.R. Subramanian, a long time civil servant and high-ranking administrator, has called government ministries and departments ‘extractive fiefdoms’ operating in accordance with ingenious methods.⁴⁸

In late 2014, the same T.S.R. Subramanian was appointed to lead a high-level committee to examine the country’s main environmental laws and policies and propose revisions. The committee proposed a rewriting of the country’s six main environmental laws in order to streamline the allocation of infrastructure permits and clearances through a single window.⁴⁸ The committee’s report recommended taking the clearance powers away from the Ministry of Environment, Forests and Climate Change (MoEFCC) and vesting them in a National Environmental Management Agency and a state level State Environmental Management Agency.⁴⁹ This would enable ‘expeditious clearances’ for projects of

national importance. The subtext was that such a change would empower central ministries in the clearance process, facilitate a vertical deployment of rents, and diminish the horizontal distribution of rents across a swath of agencies. The move to develop single windows for expeditious clearances could also facilitate the entrance of global financiers and companies into mega infrastructure projects. After the report was publicized, citizens argued that the new structure would advance a disjunctive technocratic approach to environmental management and further weaken government monitoring and compliance. This would also perpetuate state debt in public sector projects.^{50,51} In such a single window clearance process, some citizens worried, the regulatory framework would be hollowed out even further. Citizenship opposed the rewriting and final document in the NGT⁵² and in this case, the criticism reached political leaders. In July 2015, a House Parliamentary panel recommended scrapping the Subramanian report in response to citizen outrage.⁵³

In a memoir published much earlier in 2004, Subramanian noted that the massive investments needed for infrastructure had not seeped into public awareness. They were, at that time, not within the capacities of the central and state governments as they headed toward bankruptcy. Moreover, private sector players were not capable of the required scale of funding (Ref 54, p. 302). The financial predicament has only deepened and today these financial difficulties create an economic context for the demand for expeditious clearances. At that time, what Subramanian wrote about clearances in thermal power projects is still instructive for hydropower dynamics today. Subramanian wrote:

I got involved in the complexities for power projects. All my experience and abilities had not prepared me for the labyrinths I had to enter. As is known, to establish a large thermal power plant there has to be coordination among a number of agencies. There are countless agencies that need to ‘bless’ a project. If I have not left out some, at central level these are the Central Electricity Authority, power ministry, environment ministry, finance ministry, coal ministry, railway ministry. Others such as the CBI would come in, but a bit later. At the state level too, there are a number of agencies that need to bless a project. This goes right down to the local district authorities. When the project promoter is one of the domestic public sector agencies, these clearances could be taken for granted as routine. Time consuming but the approvals would come. However, when a private investor, Indian or foreign enters the scene, the whole process turns into a circus. Each of these important

agencies mentioned above thinks that it can hold the country to ransom (Ref 54, p. 303).

In 2016 the Minister of Environment, Forests and Climate Change, before his transfer to another government department, was noted by the press for speaking in a similar vein. The media characterizes the scene in an amusing way, yet the consequences of such a flippant approach may be quite serious.

On May 11, talking at an event organised by a Marathi channel to commemorate two years of Modi Government, Prakash Javadekar, the Minister for Environment, Forest and Climate Change, narrated an anecdote. Some industrialist, who was a project proponent met Javadekar and started cribbing about the delay in project clearance. "I tried telling him that there are certain conditions that need to be fulfilled and only then any project is given clearance. He immediately said, 'put any condition but accord clearance'."

"Any condition?" the minister asked. "Yes, any condition," the proponent said.

The only reason he was willing, Javadekar conceded, was he was sure there was no monitoring for compliance of those conditions.

"This", said Javadekar, "we plan to change. With the help of technology, we are putting in place a system that will enable us to know step by step status of any project."

The missing system for monitoring is one of the reasons that forest or environmental clearances granted to several projects are routinely challenged in the NGT. But even before the monitoring stage, granting an approval is a time consuming process if carried out with due diligence, which is clearly not being done. So every now and then, there are cases in the NGT challenging either the environmental impact assessment, the social impact assessment, or the cumulative impact assessment. Public consultation has been reduced to farcical meetings and these are more often than not being challenged.

Incidentally, Javadekar, at the same event, reiterated his earlier announcement of bringing down the time for granting approval to infrastructure projects to 100 days for ease of business and avoiding delay to keep costs in check.

"As it is, most clearances are open to legal challenges. If the Ministry is lenient while clearing the projects faster, there would be increased litigation," says Himanshu Thakkar of South Asia Network for Dams, River and People (SANDRP).⁵⁵

The key phrase in this report is the following line: 'The only reason he was willing, Javadekar conceded, was he was sure there was no monitoring for compliance of those conditions.'

This condition of manipulation in the clearance process is also reflected in the 2014 Subramanian report. That report states:

The Committee finds uneven application of the principle of separation of powers as established by the Constitution of India, in the administration of environmental laws. The state – arbitrary, opaque, suspiciously tardy or in-express-mode at different times, along with insensitivity – has failed to perform, inviting the intervention of the judiciary. Judicial pronouncements frequently have supplanted legislative powers, and are occupying the main executive space. The administrative machineries in the Government in the domain of Environment & Forests at all the levels, authorized to administer by Parliament's statutory mandate, appear to have abdicated their responsibilities. The doctrine of proportionality, principles of sustainable development and inter-generational equity, doctrine of margin of appreciation – these have been the basis of judicial orders in the matters of environment and forests laws. However, the perceived role of ad-hoc committees in decision-making and implementation appears to have reduced the MoEF&CC to a passive spectator, with little initiative except waiting for the Court to say what next. The Committee's aim is to restore to the Executive the will and tools to do what it is expected to do by the statutes.⁵⁶

MODE 3: CITIZEN INPUT THROUGH THE NGT

The third mode of governance occurs as citizens confront government and company practices in the mediating spaces of the NGT. The NGT was created as a space for deliberating environmental problems with scientific advisors and the public and allows the kinds of public interest petitions that used to be heard through the public interest cell in the Supreme Court. This citizen participation is an expansion of the legal remedy of mandamus, which has become a productive way to call up the lawlessness of the state.⁵⁷ Ongoing civil activism becomes a 'continuing mandamus,' to borrow the metaphor, when citizens use judicial power to limit the rent-seeking practices of officials, brokers, public relations agents, mafias, and large caste and ethnic-based parties.

The NGT's powers include review and determination on environment-related cases of all kinds. In

terms of hydropower development, the court can suspend clearances, require review and assessment, appoint experts and issue fines, and closures or appropriations of resources. The NGT is the only entity that can suspend an environment or forest clearance that has been issued by the Ministry of Environment, Forests and Climate Change. It has suspended clearances in many sectors, for instance, in the fields of thermal power and coastal harbors.⁵⁸ It has put the breaks on project construction and mining extractions that have occurred without appropriate clearances.⁵⁹ Recently, petitioners have challenged actors in the real estate industry arguing that they too need a clearance framework and protocol to regulate construction. While petitioners routinely challenge forest and environment clearances to hydropower projects, the documents are rarely withdrawn by the NGT. In one of just a few cases, the NGT suspended the clearance for the 780 MW Nyamjang Chhu HEP in the state of Arunachal Pradesh.

The writ petition is a tool used by the citizen to access the power of the judiciary and with that power influence a government practice. A specific kind of methodology is developed through writs, intervention applications, rejoinders, orders, and judgments. The documents are highly rational and logical and some are infused with poetic justice. But their power outside the realm of logical debate is limited. This is the sphere of noncompliance encountered on the ground, when law and court orders are 'not implemented' through corresponding resource use practices. The paper now turns to a specific case to give a more concrete outline to the third mode of governance.

Suspending the clearance for Tawang

In 2012, the Save Mon Region Federation filed a petition in the NGT against the project developer of the 780 MW Nyamjang Chhu project. The hydropower project was located in the northwestern corner of Arunachal Pradesh near the border with Bhutan. The petitioners contended that in the project application, the developer did not disclose the potential impacts on the wintering habitat for black-necked cranes. The site of the Nyamjang Chhu project is proposed for a 3-km stretch of the Nyamjang Chhu River between Brokenthang and Zemithang. This is one of two wintering sites of the black-necked crane in India. The bird is legally protected in Bhutan and India and considered sacred in Buddhist traditions.⁶⁰ The Buddhist Monpa tribe of this region of Tawang reveres the black-necked crane as an embodiment of

the sixth Dalai Lama, who was from the district. The black-necked crane is rated 'vulnerable' on the list of endangered species produced by the International Union for Conservation of Nature (IUCN). It is listed in India's Wildlife Act as a Schedule 1 species, a schedule that gives animals and birds the highest legal protection.

Through the cause lawyer, the citizen group initiated an appeal of the Environment Clearance for the project just after they learned it had been issued. At first, the appeal was rejected by the NGT for lateness in submission. Later in the court, the petitioners argued that the clearance had not been put in the public domain until after the legal period of notice for appeal. Therefore, their submission for appeal had been delayed beyond the stipulated period. The discussion in the hearing brought up the problem of slow or complete lack of disclosure of information by government agencies and specifically by the Ministry of Environment, Forests and Climate Change. This appeal pushed the NGT to issue new guidelines for making clearances and other environmental permits visible to the public on web portals, and through national and local newspapers and public venues.

Once the NGT allowed them to proceed with the appeal, the petitioners argued that the habitat and possible impacts of the project on black necked cranes had not at all been acknowledged in the assessment studies and reports. These were absent in the documents and final clearance assessment made by the Environment Appraisal Committee (EAC). Once the EAC decided to approve the project, the MoEFCC issued the clearance, again without any mention of the endangered species. At that time, the petitioners had also argued against several other hydropower projects in the planning stage, pointing out that such developments would be destructive rather than beneficial for local communities. The SMRF leader alleged that some of the proposed projects would destroy religious sites important to Buddhists.

Over the following 2 years, the NGT did not provide a decision on this appeal. In early 2016, local community members started protesting at the dam site and in the city of Tawang. The protests were at first peaceful, but the tension soon escalated and eventually one of the leaders, a Lama at the local monastery, was arrested. Following that, the police fired into a crowd of protesters and two youth were killed.⁶¹ This appears to have been the tipping point for the NGT and soon after the court considered the appeal more seriously. In a hearing on April 7, 2016, the Green Tribunal suspended the EC given to the

Nyamjang Chhu HEP on the grounds it would be located at the wintering spot of the endangered black-necked crane. The order reads as follows:

Judgement of the National Green Tribunal in the matter of Save Mon Region Federation & Others Vs Ministry of Environment and Forests & Others dated 07/04/2016 regarding grant of Environmental Clearance (EC) dated 19.4.2012 to the construction of 780 Mega Watts (MW) Nyam Jang Chhu Hydro-electric Project (NJC-HEP) in Tawang district of Arunachal Pradesh.

The Tribunal has directed that the EC dated 19.4.2011, is suspended till the time the studies as directed are carried out, public consultation thereon done, the Expert Appraisal Committee (EAC) considers outcome of such public consultation, carries out a fresh appraisal of proposal for grant of EC, makes recommendation to the MoEF&CC, and the MoEF&CC acts upon such recommendations in accordance with law.⁶⁰

The cause lawyer representing the citizen group stated, 'This is probably the first time that the threat to wildlife played a key role in the court's decision to suspend environmental clearance.'⁶⁰ A spokesperson for the hydropower company then claimed they were unaware of the presence of the black crane when they applied for the clearance; they agreed to comply with the order and wait for a new assessment by the court appointed committee.

In this case, the citizen petitioners and cause lawyer persevered to work through a gap in policy and pushed the justices to write new rules for disclosure of information on projects cleared by the Ministry. They were able to add protection of endangered species to the clearance process. The NGT justices invoked their power to suspend the clearance as a way to get a remedy accomplished in the short term. The long-term fate of the project is not yet known.

This mode of governance provides the only leverage in a system that is run almost entirely by special interests in government and industry. Such interested entities are not inclined to regulate themselves and comply with policies and laws; government departments responsible for monitoring and enforcing compliance are equally lax. In this context, the citizen engagement through the NGT and the willingness of justices to defend citizens' constitutional rights are important components of the balance of power. Thus as a mode of governance, the NGT allows citizen participation in policymaking

and law enforcement in a context where the regulatory institutions are not exercising their powers for the public good.

CONCLUSION

The peculiar character of document production described in these examples is the apparent guideline that documents need to be produced despite widespread noncompliance and lack of implementation. This document production marks the presence of shared policies and laws and the official institutions that issue them. But the manner and reason for document production and the implementation or compliance generated by these documents follow multiple pathways and appearances, and may be shaped by rent-seeking practices. This means that governance occurs by documentation and by interpretation. That is to say, documents allow for a legitimate entry into resource uses. Then the interpretive process moves those practices into wider or more constricted realms of resource uses. Resource use practices are shaped further by citizen inputs through the NGT. The clearance becomes a gatekeeping document; once issued it allows a broad range of resource uses. Citizens step in to narrow or limit those uses through their court petitions.

Noncompliance may occur when government or industry players perceive that enforcement by government or critical citizens may be lax and they may operate under this assumption until called up by the NGT. Industries may enact their resource uses more broadly than originally prescribed in the gatekeeping documents. In this way, more forest may be cut down, or more of the riverbed may be exploited than what was originally permitted, or more water may be extracted from the stream than originally permitted. All these more extensive interpretations of permissions affect the functioning and integrity of ecologies and habitats. Actors in the field of hydropower work through a labyrinth of institutions, and in each phase negotiate their status and face the threat of suspension by the NGT. They may also use their institutional powers to reinstitute these permissions after review by the NGT. The NGT also measures its responses against the political culture of the hour, the scientific trends, populist movements, and the specific goals of the current government.

Governance is a total social fact and therefore diffused in its operations in most nation-state contexts, especially in democracies such as India. It is important to pinpoint the specific pathways of power at work in a particular country or region, since they

will vary by institutional configuration, culture, religion, and so forth. The three modes of governance outlined here show the specific dynamics at work between government departments, industries, judicial authorities, and citizens. Documents play a role in guiding behavior and requiring unwritten yet culturally acceptable rules and procedures. Research must

probe a variety of accounts, materials, and sources to understand the interplay of these modes of governance in the field of hydropower. Knowing more about these governance modes will shed light on the human drivers of ecological and hydrological changes and ultimately climate change.

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