An earlier chapter of this book summarized the legal, policy, institutional and socio-economic conditions at the time Nishorgo began. The intervening years have provided the opportunity to revisit those contextual elements.

The purpose of this chapter is to identify a set of more specific factors that have influenced the way co-management has evolved in Bangladesh, and in particular have framed the choices of key stakeholders involved in the process. Rather than referring to observable legal and policy conditions (such as the Bangladesh Wildlife (Preservation)(Amendment) Act 1974 or the National Biodiversity Strategy and Action Plan for Bangladesh), socio-economic conditions (such as levels of poverty or rates of economic growth), or organizational conditions (such as proportion of Forest Department staff trained in participatory management), the “factors” included here aim to capture the specific social, institutional and cultural contextual frameworks in which the decisions of individuals are made concerning conservation. These framework “factors” may better explain the behavior of participating stakeholders in co-management than does the formal and standard review of contextual elements presented earlier.

The “factors” identified here are of two broad types: assumptions and beliefs that can frame decision-making, and descriptors of the social or institutional environment in which decisions are made. The category of assumptions or beliefs includes factors (see box) 2, 7, 8, 9 and 18, while the social and institutional context includes 3, 5, 6, 10, 11, 12, and 14.

The context for co-management in Bangladesh presents a number of differences from co-management as it has been practiced and described in other countries. Assumptions about what models of co-management might work for the specific needs of forest PAs in Bangladesh were informed by the experiences of other countries, in particular those written about by Borrini-Feyerabend et al. (2004) and Kothari et al. (1998). In a number of cases, the Nishorgo team made assumptions about the context for co-management, only to find that those assumptions were too general, or not as helpful as had been expected. This is certainly the case for our assumptions about the extent to...
which stakeholders would be willing to assert their rights in the face of established authorities, when given the opportunity to do so.

The factors are grouped by the co-management participants they most affect. The first six are ones which affect the decisions made by local stakeholders at PA sites. Those affected here are the non-government stakeholders that were targeted as likely participants in the collaborative management process. Generally, empowerment of this group was slower than had been expected at the outset, and these six factors help to explain why that was the case. The second group of factors covers those that have framed decisions of the Forest Department: the government officers most directly and fully engaged in the forest co-management process. It became increasingly clear over time that the officers and staff of the Department were responding to a number of internal beliefs and incentives, and these six factors attempt to capture them. Finally, we identify six factors affecting all participants in the co-management process, from communities to Forest Department but also including the broader set of government officials and civil society that have a role, albeit secondary, in the co-management process. The factors affecting these three broad groups are identified below.

### 18 Contextual Factors for PA Co-management in Bangladesh

**FACTORS AFFECTING COMMUNITY-LEVEL CO-MANAGERS**

1. Nowhere in Bangladesh is “remote”: government presence and authority is asserted throughout the country.
2. Local stakeholder hesitancy to challenge the status quo.
3. The complexities of identifying and working with “the community”.
4. The limits of social forestry as a participatory model applicable to co-management.
5. Wider than expected social acceptance of corrupt behavior.
6. Physical threats and violence associated with political interventions in PA management.

**FACTORS AFFECTING THE FOREST DEPARTMENT**

7. Revenue generated from public lands must be forwarded to the central treasury.
8. Forest management oriented to maximize revenue.
9. Limited financial resources and training for conservation interventions in PAs.
10. Forest Department traditions of education, discipline, social status and conservatism.
11. Changes in trends and financing of large-scale forest projects.
12. The evolving public image of the Forest Department.

**FACTORS AFFECTING THE FULL RANGE OF CO-MANAGEMENT STAKEHOLDERS**

13. The precarious situation of minority indigenous groups.
14. A unique confluence of poverty and high population density.
15. Competing pressures from commercial extraction versus local household use.
16. The dramatic scale and speed of resource extraction.
17. Protected Areas as domestic tourism destinations.
Factors Affecting Community-level Co-Managers

(1) Nowhere in Bangladesh is “remote”: government presence and authority is asserted throughout the country.

In her summary review of community-based forest management in Africa, Wily argues that collaborative and community-based forest management regimes have arisen on that continent as a means of “giving legal recognition to the millions of citizens who in practice have been serving (with variant effort and effect) as forest guardians in default of the reach of the state” (Wily 2002, p 5). Her observations about this “default of the reach of the state” is echoed in the logic for community-forestry in Nepal as well as in joint forest management in India, where in places such as Orissa, neighboring communities brought degraded sal forests under community management. Where the government has limited effective authority over natural resources, then the rationale for engaging communities is strengthened.

The PAs that served as the target areas of Nishorgo were remote by comparison with other parts of the country. The areas around Rema-Kalenga Wildlife Sanctuary and Satchuri National Park, for example, are scarcely populated by comparison with other areas in Bangladesh. Other than a small number of Forest Villagers at Rema-Kalenga and one other at Satchuri, there are no residents within these two PA, and the population in the immediate buffer areas is also small.

Forest Department staff presence in these forests has also been sparse. The nearly 1,795 hectares of the Rema-Kalenga Wildlife Sanctuary was at the time of Nishorgo’s initiation under the authority of one Range Officer, three Beat Officers and 12 Forest Guards, all of whom depended on walking or taking rides from motor or bicycle rickshaws to access their area. A similar lack of Forest Department presence existed at the other five Nishorgo PAs.

Given the remoteness of the areas, at least by comparison with other parts of the country, the Nishorgo team assumed that neighboring communities would step in to fill the gap left by a relative absence of government, and thus take a stronger role in the co-management governing process.

As the Project’s implementation progressed, however, the authority of the Government, and especially of the Forest Department, in even relatively remote areas of the country, became increasingly clear.

The authority of the Government in remote rural areas is enforced by a highly centralized government structure that has concentrated power even as proposals for decentralization have
been discussed by recent governments (Asaduzzaman 2009, Panini 2006). An analysis from 1999 observed that: “a top-heavy bureaucracy with its bastion at the secretariat has become the source of all power. This centralized administration has established absolute authority over all aspects of the state from policy formulation to program implementation” (Transparency International Bangladesh 1999).

Bangladesh is divided into seven administrative divisions, and further divided into 64 Districts (Zila) and then Sub-Districts (Upazila). None of these administrative levels are managed by elected officials, all are instead managed by officials appointed by the central government. Only at the lowest level of political sub-division – the Union – are local councils elected. This lack of devolution of authority in general has permeated the thinking of officials (civil servants) in their attitudes of control and authority rather than responsiveness to local needs or being willing to share responsibilities.

The central government can thus exert authority over the most local level of resource management. And this authority certainly applies to the Forest Department, which maintains full authority over all Reserve Forest as well as Protected Area lands. The implication of this authority is that nowhere in the forest system is beyond the authority of the Government. Central government officers – including the Forest Department staff – are expected to assert their authority sufficiently to ensure management of those resources under their statutory control.

In remote forested areas, Forest Department staff members have long been recognized as the principal government authority, even over the police or administration, neither of which in earlier times had much presence in these areas. Local residents living around PAs have known for decades that they would benefit from recognizing the authority of local government officials, including the Forest Department. Studd recounts this anecdote from her 2004 review of the conditions for co-management at Nishorgo sites:

“A former ACF near Chunati told this story. In the 1980’s, he was requested by the then CCF to report the names of all encroachers in newly-created Chunati Sanctuary. The ACF wondered how he would get these names for submission to his CCF. Upon asking one of his Beat Officers, the Officer told him: ‘Boss, it is very easy to get the names. Do you see the people in line in front of my office? They are all asking me to write forest offences against them for encroaching in the Sanctuary.’ Those local citizens were smart enough to realize that such a formal offense filed by the FD would -- in the future -- constitute grounds for a land claim.” (Studd, 2004, p 10)

Thus communities have long recognized the authority of the central government, even as they have found creative approaches for taking advantage of it.

(2) Local stakeholder hesitancy to challenge the status quo.

Understanding that Government authority, even in remote areas, might be an obstacle to participation in co-management, the Nishorgo team pushed for a formal and written declaration of community authority. To that end, work began in 2004 to craft the new Government Order (GO) for co-management, and that GO was signed in 2005. As the GO was being developed and after it was released, senior staff of the Forest Department, and particularly the Conservator
of Forests responsible for Nishorgo, made repeated visits to Nishorgo community co-managers with the objective of encouraging them to stand up and take a more active role in PA co-management.

The team assumed that the GO, with its explicit recognition of co-managers as actors and beneficiaries of PA sites, would stimulate an increased willingness by communities to assert their authority vis-a-vis the Forest Department and other local Government representatives. But (as discussed more extensively in chapters 4, 5 and 6), the pace of that empowerment did not match what was expected.

The implementing team – including the authors – assumed that it would be able to facilitate a process by which local stakeholders would take advantage of these new opportunities to assert rights and obtain benefits from the PA management process. But the team – including the field-based NGOs directly interacting with the affected stakeholders – was not as effective at facilitating this empowerment process as had been expected.

The slow pace at which the empowerment process was facilitated ran counter to the understood capacity of leading NGOs to support this process. We had understood that our partner NGOs would be able to assist local stakeholders in challenging existing Government authorities to obtain the rights due to them in the GO and other instruments. Most NGOs in Bangladesh – including our implementing partners – aim to assist poor communities in challenging authority.\(^1\) The Nishorgo field NGO partners RDRS and CODEC had done extensive working in assisting the poor to federate and claim rights from established authorities.

It gradually became apparent, however, that the particular context in which NGOs operate in Bangladesh puts them in a precarious position when asked to assist communities in challenging existing authorities, and particularly Government authorities. The Government has at times formally limited NGO operations, and such challenges have led NGOs to focus more on economic and social development where there is less of a challenge to existing powers or authorities (see Feldman (2003)).

These findings certainly applied to Nishorgo’s sites. Even with a signed GO giving communities authority, signed management plans further clarifying those authorities, and the active verbal support of senior FD officials, local community members have still not actively

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\(^1\) For example, BRAC’s Social Empowerment goals (included at www.brac.net) include this language: “We aim to empower the poorest people by increasing their human, social and political assets so they are aware of their rights, can claim their entitlements and resist exploitation.”
challenged the status quo. The team recognized a persistent hesitancy, even a sustained fear, and recognized also that this hesitancy would need to be overcome in any future attempts to further co-management.

(3) The complexities of identifying and working with “the community”

The IUCN has recognized that global biodiversity “survives on territories under the ownership, control, or management of indigenous peoples and local (including mobile) communities.” Such sites, which the IUCN refer to as Community Conserved Areas (CCAs), are distinguished by two primary characteristics: (1) predominant or exclusive control and management by communities, and (2) commitment to conservation of biodiversity, and/or its achievement through various means.²

Wily’s review of community-based forest management in Africa referred to the management of forests by “communities” (Wily 2002), and Borrini-Feyerabend et al. (2004 p 16) suggest that co-management may be considered appropriate where “local actors have historically enjoyed customary/legal rights over the territory or resources”. One of the important elements of co-management has been recognition of traditional institutions and rights of communities by government.

As Nishorgo’s implementation evolved, it became increasingly clear that such concepts of “community” or “communities” created confusion when applied to Nishorgo pilot PAs. Early in the appraisal processes, the team attempted to understand and delineate the “community” of individuals and groupings affected by each PA. But at Nishorgo PAs, it was difficult to define who the target community included. The population living in and around each PA could come from multiple ethnic groups, have migrated from other areas around the country, and is governed by a variety of local, regional and national authorities.

Of those factors making it difficult to interact with a well-defined PA community, among the most important is the absence of a politically recognized representation at the scale of the villages or hamlets that surround the PAs. In other countries of South Asia, representative governance takes place closer to the level of a village than in Bangladesh. India has its recognized Gram Sorkar and the Gram Panchayat system. Nepal has a long history of village level Panchayat councils for any village with over 2,000 citizens, with these Panchayat evolving since the 1962 Panchayat reforms into Village Development Committees (VDC), a locally elected body. In both Nepal and India, a long tradition of recognized local governance has evolved today into village-based institutions that represent the needs of citizens at a local level.

There exists no parallel system of elected governance at this local scale in Bangladesh. The lowest level of elected representatives is the Union Parishad (UP). The number of people represented by this elected authority is much larger than the VDC in Nepal or the Gram Panchayat in India. As a result, individual villages directly adjacent to and affected by a PA have no recognized elected leader, instead there are UP or council members that they elected at the ward level (with three wards in a Union), and in any case most power in the UP is in

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² Recommendation #26 for the 2003 World Parks Congress, on “Community-Conserved Areas”.

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the hands of the chairman. However, the chairman of the UP may live kilometers away and be scarcely affected by the PA.

There is not, in short, a close overlay between the most decentralized of elected governance structures and the Nishorgo PAs. The UP boundaries and concerns typically go well beyond PA boundaries, but there are no other elected or accepted community leaders that can speak directly for the concerns of people using a PA.

These challenges to dialogue with a local PA-affected “community” are made worse by the politicization of the Union Parishads themselves. In order to be nominated to run for the position of UP Chairperson, the candidate must have the blessing of a national political party, and remaining in the post of UP Chairperson requires that one maintain the favor of the relevant party hierarchy, whose local interests may be – and often are – at variance with the needs of conservation in a PA.

Gaps in the efficiency and responsiveness to local needs of UPs at Nishorgo sites were not outside the norm for other parts of the country. In reviewing the decentralized local governance initiatives in Bangladesh, Sarker (2006: 1308) concludes that: “Despite considerable efforts made over the years no effective and viable local government system has emerged in Bangladesh. Central control through local bureaucracy and the politicization of the management of local government affairs have been systematic phenomena.”

In addition to this issue of political representation, extensive internal migration in Bangladesh has further fractured the idea of community. At Teknaf GR, the Rohingya refugees that have migrated to refugee camps and elsewhere throughout the peninsula cannot – for political reasons at the national level – be formally engaged in any dialogue about the PA from which many of them are surviving hand to mouth.3 At Lawachara NP, other than the indigenous communities living in and near the PA, many inhabitants of the other villages migrated to the area in the 1950s. These villagers had little historic attachment to the forest. Still today, it is the migrant communities at Lawachara that are most often accused of taking part in illegal forest extraction. The villages around the other Nishorgo pilot PAs are also heterogeneous, and this has rendered it more difficult to engage in a dialogue with communities both affected by and interested in the PA resources.

The difficulties of defining and recognizing “community” have been identified elsewhere as a particular challenge to the design and implementation of co-management initiatives (see, for example, Carlsson and Berkes 2005). But the extent to which the very idea of pre-existing “community” around Nishorgo PAs fails to resonate, or have practical application, is particularly extreme. There is so much diversity of ethnic, political, and socio-economic

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3 Many of these refugees survive by combing the forests near refugee camps to cut any twigs, trees or branches they can find, selling them to the nearby brickfields or traders, and using the rest. In 2007, a proposal was made to disseminate improved stoves to the refugee camps, a proposal that would have both reduced fuelwood extraction and improved health conditions in the camps through the chimneys that accompanied the stoves. But as a Government project, Nishorgo could not formally take part in any such support, and in any case the then-Director of Medecins Sans Frontieres refused even to consider accepting this assistance, believing instead that the Americans should take steps to fully recognize the refugees rather than providing small scale support such as stoves.
groupings near any given PA, and such lack of clarity about the appropriate community representatives to engage in the process, that the Nishorgo co-management process became one of artificially defining “communities” by their association with and dependence on the affected PAs themselves. It became increasingly common and appropriate to use the term “PA community” as a name for the loose groupings of individuals and villages that have emerged around interest in and management of a given PA.

(4) The limits of social forestry as a participatory model applicable to co-management

As Nishorgo began, a number of leading FD officers argued that the rapid expansion of Bangladesh’s social forestry in the 20 years preceding Nishorgo would make concepts of participation in forest management more readily accessible to potential co-management stakeholders. Under the most common model of social forestry employed by the Forest Department, a single person is given usufructuary rights to one hectare of degraded forest land on which the Forest Department pays to plant fast growing trees, usually exotic species. The Forest Department harvests the plot after 10 years, and under the Social Forestry Rules 45% of the proceeds from auction are handed over to the beneficiary.

Social forestry has become widely known and applied throughout the country, with mixed results (see Khan et al 2004). Apart from any of its negative outcomes, it has also become extremely popular in many parts of the country, as individuals have come to recognize the opportunities for income generation from land heretofore off limits to anyone other than the Forest Department staff. Prior to the introduction of social forestry within the Forest Department, neighboring communities had virtually no formal involvement in the management of trees and forests on public land.

In spite of these benefits, however, the nature of participation as effected under social forestry did not in the end provide the expected basis for the participation process in PA co-management. Under social forestry, after all, the selected beneficiaries (the term used by the Forest Department) received the selected hectare from the FD, including all saplings and preparatory materials (fertilizer, etc.). The FD also paid to have the field plots cleared and prepared. So, in the end, beneficiaries had little involvement in the process other than receiving their right to maintain the planted plot, and benefit during thinning and later harvest. Moreover in this social forestry model interaction is with individual beneficiaries and there is no interest in having forest users cooperate in management of commons, instead the use rights are individualized.

While it is true that social forestry has expanded over the past two decades in Bangladesh, and that the model has allowed for many thousands of individuals...
to become more active participants in forest management, the model did not provide a strong foundation for local stakeholders to adapt under the Nishorgo co-management process.

(5) **Wider than expected social acceptance of corrupt behavior.**

During each of the five years from 2001 through 2005, Bangladesh received the lowest scores of any countries ranked in Transparency International’s “Corruption Perceptions Index” (TI, 2001-2005). A number of valid objections have been raised to the methodology for this index, not least that the relative freedom of the press in Bangladesh allowed more such stories to be reported. But whatever the precise ranking, it is fair to say that corruption is indeed pervasive at the local level of government where co-management is being piloted and that this corrupt behavior has had a formative impact on the way in which co-management has evolved, and can evolve in Bangladesh.

In part due to this context of corruption, those invited to take part in co-management begin with assumptions that other stakeholders may be involved for reasons of illicit self interest. The trust required to establish a new governing body has been difficult to develop, with accusations common across participants. Non-government participants assume in particular that government officials are likely to be involved for self-interested reasons.

Where recourse to the justice system is required in and around the PAs, it is widely accepted that illicit payoffs or political influence can help to alter enforcement actions, including actions against illegal felling of timber. Such irregularities in the justice system arose in multiple cases of illegal felling in five years at Nishorgo sites. Repeatedly at Chunati WS, Rema Kalenga WS, and Lawachara NP, legal cases filed against individuals for being involved in illegal logging have been slowed or stopped, and it is widely understood that this is due to illicit influence.

The continued presence of brick fields within the boundaries or immediate buffer areas of two Nishorgo pilot sites further demonstrates the corrupt context in which co-management must operate. The Bangladesh Environmental Lawyer’s Association had by 2008 filed cases against owners of brick fields illegally located near Chunati and Teknaf PAs, but none of those was successfully prosecuted.

The readiness of local co-management stakeholders to believe in the possibility of collaborative governance – meaning collaboration with the Government – is constrained by the corrupt behavior they see around them. Overcoming this fundamental lack of trust in government has required persistent efforts at all sites, and remains a challenge even as co-management organizations become stronger.
Physical threats and violence associated with political interventions in PA management

Pervasive corruption emerges in a particularly tangible form when violence and political influence are used to enforce illicit practices, and such violence has been a common feature at PAs where co-management has been piloted. In the short time since Nishorgo began, armed gangs at pilot sites have repeatedly attacked community patrol groups, with one community patrol member murdered, four put in hospital and many more injured. Where assaults and violence have taken place, it is understood that illicit logging, using force if necessary, has the backing—or at least is in the knowledge—of local elite persons as well as central political authorities.

A 2005 incident involving clear-felling within the Rema-Kalenga Wildlife Sanctuary provided just one of many tangible examples of the ways in which politically protected individuals can intervene in forest management. At that time, nearly 200 hectares of mature mixed teak and other hardwoods was clear-felled within the boundaries of the Wildlife Sanctuary. It was widely believed and understood that the Range Officer responsible at Rema Kalenga at the time had high level political protection.

The Co-Management Committee of Rema Kalenga made pointed and public note of the laxity of this officer, and did so at considerable risk of retribution. However, the concerned Range Officer was only moved to another post, with no proceedings ever started against him. Within the Forest Department, those officers who knew of this man’s behavior knew also that it was dangerous to take open action against him.4

In the Forest Department the posting of lower ranking staff – and particularly those appointed in the powerful role of Range Officer – was at times alleged to have been carried out at the behest of (or with the approval of) the minister himself. In the face of organized and at times illicitly-operating political structures, it is understandable that poor and disenfranchised citizens hesitate to speak up and demand their rights in managing protected areas.

Factors Affecting the Forest Department

The six preceding factors help to explain the choices and decisions of those stakeholders bordering the Nishorgo PAs. The next six factors identified below help to explain the decisions taken by Forest Department staff.

Revenue generated from public lands must be forwarded to the central treasury

Protected Area co-management requires a degree of benefits sharing with those communities engaged in conservation. In Bangladesh the potential benefits to share from PA lands and the surrounding Reserve Forests (all five of the Nishorgo PAs are bordered by Reserve Forest) are significant. Rich soils and high rainfall combine to form fast-growing forests, while a growing

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4 Mid- and senior-level Forest Department staff have regularly attempted to counter such organized corruption. In the Rema-Kalenga case, two senior officers worked with the Rema Kalenga Co-Management Committee as the Committee formed its strategy against the Range Officer. The two senior foresters knew that if they were to directly call the Range Officer to task, they would have risked retribution from one or more of the highly placed political protectors of the Range Officer. They recognized also, though, that if the people of the area – in this case through the Co-Management Committee – were to voice its concerns openly about the officer, then the two officers would be protected.
middle class and interest in nature tourism create tourism-related opportunities. The formal sharing of benefits from these resources requires a legal or institutional framework.

As Nishorgo began, the social forestry model provided the country’s most compelling opportunity for direct sharing of revenue generated from government land with beneficiaries. Under the common social forestry model, 45% of timber sales were (and still are) passed to beneficiaries at time of clear felling. Nishorgo began with an assumption that the social forestry model of directly retained benefits could be applied to revenue generated by PAs.

In spite of the precedent set by social forestry, across the Government of Bangladesh there is a deep-seated tenet that not a single item of value or a single Taka can be generated from Government land without it being collected and registered to the central government. The policy has its origins in the 1972 Constitution itself and was referred to regularly by senior officials as a reason that communities could never retain PA entry fees or other PA revenues.

This underlying understanding of Government policy created roadblocks to co-management repeatedly, not just for the proposed sharing of 50% of PA entry fees with communities (that took four years to be approved, and even then with many conditions), but equally importantly for proposals to share smaller benefit streams. At one point early in 2005, the FD Project Director of Nishorgo proposed that community patrol groups should have the right to sell tea and biscuits at PA entry areas. Other FD officers raised numerous objections to the legitimacy of these operations taking place on PA lands. Later, when grant funds were to be used to construct more permanent kiosks – again to service the increasing numbers of visitors with benefits going to community patrollers – objections were raised within the Department, again on the grounds that no revenue could be generated on Government land without a written policy allowing it and without all the revenue being booked first to the Central Treasury.

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5 Article 84 from the November 1972 Constitution of the People’s Republic of Bangladesh includes this: “Consolidated Fund and the Public Account of the Republic: (1) All revenues received by the Government, all loans raised by the Government, and all moneys received by it in repayment of any loan, shall form part of one fund to be known as the Consolidated Fund. (2) All other public moneys received by or on behalf of the Government shall be credited to the Public Account of the Republic.”

6 One critical reference to this clause was made in a 2008 meeting on PA entry fee benefits sharing with the Joint Secretary, Ministry of Finance. Again referring to this language from the Constitution, the Joint Secretary argued that – strictly speaking – the Social Forestry Rules and practices allowing benefits sharing should be declared unconstitutional.

7 As Nishorgo worked in 2007 to obtain approval to have 50% of PA entry fees retained directly by co-management organizations (CMO) at the point of transaction, one project staff member consulted with the then-Country Representative of the World Bank to Bangladesh. She stated at the time that Bangladesh’s financial system was the most centralized that she had ever experienced. The Bank was working with the Ministry of Health at the time to allow a portion of paid hospital fees to be retained at the hospitals without being forwarded to Dhaka’s Treasury office, and this effort had not yet succeeded (Personal communication: Christine Wallach).
There are valid historical reasons for the Government to centralize revenue collection, but holding firm to this policy while at the same time promoting co-management has slowed the creation of new conservation incentives, and remains a fundamental challenge in continuing to extend incentives as Nishorgo’s work continues.

(8) Forest management oriented to maximize revenue

In April of each of the years that the Nishorgo project was active (2003-2008), a dialogue would ensue between the senior staff of the Forest Department and of the Ministry of Finance concerning the amount of revenue the Forest Department could expect to generate in the subsequent budget year (the Bangladesh financial year runs from July 1st through June 30th).

In the five years from 2002-2007, the revenue generated by the Department hovered at around 100 crore Taka per year, or just under USD 15m, with an increasing portion of this coming from social forestry, and much of the remainder coming from revenues from timber sales. This compares with the Department’s annual costs of only USD 1.7m. At a point between April and June, a revenue target would be set for the Department, and the Department was expected to meet that target. Responsibility for meeting the annual target was divided among administrative divisions within the Department. From the Ministry of Finance point of view, the Forest Department has been considered as a revenue-generating Department for years. Indeed, the Department’s central purpose in the colonial period was the generation of revenue from forestry.

As a result of this revenue generation focus, FD officers, including those at the PAs, are driven to some degree by the need to generate enough revenue to meet annual targets. New Government projects proposed within the Department have a better likelihood of being accepted by the Planning Department if they will generate additional revenue. This was a partial rationale for proposal and approval of Eco-Park projects, which were designed to generate revenue from entry fees, all of which are forwarded to the central Treasury. FD staff recognize that generation of new revenue is looked upon favorably by senior staff of the Department, not least because it assists in meeting revenue targets to which the Department is held.

(9) Limited financial resources and training for conservation interventions in PAs

This interest and attention given to revenue generation within the FD results, not surprisingly, in less time and energy being committed to the many other PA management activities that do not generate revenue. Matching the focus on revenue generation has been a concomitant under-investment in conservation and the staff training required to improve management of PAs.

Facing limited budgets and training for PA management, FD staff posted to the PAs conclude that there is little “real” work to do at those sites, where “real” work refers to forest plantation activities. Few FD staff have been trained in habitat restoration, and even less in areas of trail development, or interpretative support and interactions with CMOs or tourists. So even where resources are available for the PA, field staff generally do not know how to use those resources.

Historically, this difference in perspective about the balance of work in PAs versus other types of forests help explain why the PAs have been less well protected than other Reserve
Forests. From the field staff perspective, a Reserve Forest that has not also been protected under the Wildlife Act can still be “managed” and is thus more valuable. In a “managed” forest, FD staff can oversee plantation work and collect revenues from timber. Such activities – from the local FD staff perspective – makes them more worthy of protection than the so-called “double protected” forests (such as all the Nishorgo PAs) covered under both the Forest Act and the Wildlife Act.

Even after training through the Nishorgo approach, FD staff managing PAs still do not have a sufficiently clear understanding of what work is to be done within a PA, nor do they have sufficient resources within the PA budgets to carry out appropriate conservation management activities, nor would they get any recognition if they did take such actions.

(10) Forest Department traditions of education, discipline, social status and conservatism.

In order to understand the context in which Forest Department staff function on a day to day basis, one must also recognize that this is a department with a history that goes back more than 125 years. Some of the earliest forest management plans were completed in Bangladesh’s forests by the colonial period Forest Department and are now housed at Oxford University. A history of applied forest science has remained a matter of pride to FD staff members today, many of whom have two or three Master’s degrees or PhDs. Before partition, foresters were trained at Dehra Dun in India, and between then and the Liberation War, many were trained in West Pakistan. Most of the senior staff of the Department today have advanced degrees from universities in Australia, the US, the UK, and South Asia.

The culture of the Department from its origins well into the 1970s was one of strict discipline, high expectations for performance and high social status. Enforced dress codes stipulated blue blazers for senior staff and distinct uniforms for all ranks of officer down to Beat Officer and Forest Guards.

Even into recent years, senior FD staff maintain high respect for scientific research, in many cases publishing articles or news on wildlife or maintaining close links with zoology departments at universities. Updating the lists of endangered species for the revised Wildlife Act, for example, was carried out through a close collaboration between senior staff of the FD and zoologists and wildlife biologists from Dhaka and Jahanginagar universities in particular.

These values of hard work, discipline and leadership earned the Department a strong and favorable reputation through the 1980s, evidenced not least by the desire of educated families to have their sons pass the Civil Service exam and enter the Department. A senior Forest Officer through these times was considered to be highly educated in his field and held considerable social status.
Some of the publicized successes of the Department have helped to maintain that reputation. The Coastal Afforestation Program that was implemented through the 1980s and 1990s has resulted in the large tracts of mangroves and casuarina trees in accreted chars and along coastal dunes. And the successes of social forestry are evident in both roadside plantations and woodlots throughout the country.

These traditions are merged at the same time with a conservatism toward change and new ideas, and particularly any changes to the forest management models which are assumed to have worked well over decades.

The traditions and history of the Department present challenges and opportunities for advancing co-management today. In spite of image setbacks in recent decades, the older traditions of the Department remain. New initiatives such as co-management need to be advanced in this historical context of the Department, building on its justifiable pride while taking account of its conservatism and resistance to change.

(11) Changes in trends and financing of large-scale forest projects.

At the time Nishorgo began in 2003, the Forest Department had benefited from 25 continuous years of donor-financed loans or grants (largely from the World Bank, the Asian Development Bank (ADB), United Nations Development Programme and UN Food and Agriculture Organisation (FAO)). With a few exceptions, this external support targeted increasing the production of wood and revenue from forest lands.

By 2003, only two large loan-financed projects remained in operation in the Department: the ADB-financed Forestry Sector Project (FSP), focusing principally on social forestry; and the Sundarbans Biodiversity Conservation Project (SBCP). Senior FD staff members had begun to realize that no new projects were forecast to come online. By 2005, both the FSP and the SBCP had ended. Throughout 2004 and 2005, there were no appraisal missions undertaken by the ADB, the World Bank or the FAO – the major forest-sector investors – for new forest projects.

Within the Forest Department, the message had slowly taken hold that the well-financed days of the past were coming to an end, with a number of key implications for the Department’s operations. One implication was the increased emphasis put on direct Government-financed projects rather than bilateral or multi-lateral projects. Government financed projects within the FD typically allocate funds either for plantation development or infrastructure construction (e.g., buildings, roads, bridges). Government funded FD projects have been “small” (between USD 300,000 and USD 1.5m) by contrast with

The guest register at this historic Shyamoli guest house in Lawachara National Park includes entries by dignitaries going back to the early 1950s. It is evidence of the long history of the Forest Department in the PA. [Philip J. DeCosse]
the multi-lateral donor projects (the two most recent from ADB were well over USD 50m). The Government-financed FD projects have taken approaches largely inappropriate to conservation of PAs and are subject to little external scrutiny. They have targeted either forest plantations of species considered “productive” (e.g., agar, bamboo, rattan, acacia) or construction of visitor or tourist facilities, such as in the range of Eco-Park projects financed with these resources.

Apart from spurring a shift toward smaller GOB projects, the closing of the FSP and the SBCP also provided an important opening for co-management, and for the Nishorgo project in particular. As those projects and their financing wound down, FD staff showed a greater interest in and openness to the co-management experiment of Nishorgo, not only because it was one of the few significant bilateral operations going on at the Department, but also because it offered a potential growth area of activities within the Department itself in PA management.

Nishorgo’s first Project Director at the Forest Department noted in 2004 that if the FD were to succeed in establishing a successful co-management model for PA conservation, it would attract the attention of other major investors/donors in future years, and in this sense provide a new growth area within the Department.

(12) The evolving public image of the Forest Department.

In the late 1990s and early 2000s, the respected traditions and status of the FD were colored by a number of incidents that clouded its reputation. Stories increased of the number of FD officers – sometimes in league with those with political connections or with other civil servants – reaping illicit benefits from the forests. An increasing number of stories appeared in the major newspapers about illegal felling in forest areas. At the same time, an awakening was taking place of the public’s interest in conservation.

Records of the public consultations from the Biodiversity Strategy and Action Plan process in 2003 showed a new aggressiveness in openly criticizing the Department. During those proceedings, it was commonly and openly stated that the management of biodiversity in Protected Areas should be taken away from the Forest Department and placed under a new department for wildlife or biodiversity conservation. A similar deterioration in the image of the FD became evident in a Ministry of Environment and Forests-drafted “Wildlife Policy” in 2005, which proposed creation of a “Department of Wildlife Conservation” for all biodiversity management, implying that all PAs would be shifted out of the FD and into this new Department. The draft policy was not approved, but the forthrightness by which it attempted to exclude the Forest Department from PA management would have been difficult to imagine only a decade earlier. In addition, the multiple accusations of corruption made of senior FD staff during the period of the Interim Government in 2008 further damaged the image of the Department.

These external criticisms of the Department were not unrelated to the evolving internal image of the Department among its own staff. At one point in 2007, the Chief Conservator of Forests (CCF) – in a discussion of entry fee collection at Nishorgo sites – noted that such

8 By 2009, some evidence of the accuracy of the Project Director’s predictions were coming true. GTZ has formalized a new project in support of co-management at one Nishorgo area. Other major donors, including the European Union, expressed interest in supporting a participatory management model for the Sundarbans.
collection should be done by a private company, since “the FD staff could not be trusted to do it honestly”.

The first Project Director of Nishorgo at the FD had argued that the co-management approach, with its attendant characteristics of openness, transparency and support to local populations – might offer a welcome contrast within the Department to the criticism staff had received. Subsequently, the second Project Director and Khan et al (2008) noted that local FD staff have been increasingly allying themselves with the CMOs at Nishorgo sites in a way that helps to protect them from open criticism against the Department.

This evolving public image of the Department is an important factor in understanding the outlook of FD officers, and helps to explain their willingness to accept the participatory models implicit in co-management.

**Factors Affecting the Full Range of Co-Management Stakeholders**

(13) *The precarious situation of minority indigenous groups.*

The historic, cultural and legal relationship of minority and indigenous peoples to the forests of Bangladesh remains a focus of a debate carried on in newspapers, televised discussion forums and university campuses throughout the country. The central—and most sensitive—issue is the question of what rights indigenous peoples have to forests under statutory management of the Forest Department. Within the Department, this discussion often focuses on the length of time that a particular indigenous group has been present in a given forest area, and, by consequence, that group’s legitimacy (or otherwise) in claiming any rights to the area in which they have lived.

As is often the case with sensitive subjects, the semantics of this discussion are telling. FD staff rarely use the term “indigenous” or the term “Adivasi” (literally, “first people”) when describing those groups that have lived in forest areas. They hesitate to use those words on the grounds that many such peoples were brought to the forest areas as laborers deliberately by the FD only two or three generations ago, even as late as the 1960s. But the presence of indigenous peoples in the forest areas of Bangladesh goes back hundreds of years, and certainly so in the case of the Hill Tracts and Modhupur, to name two areas. Even where minority peoples have moved into forest areas more recently, they have been the first to settle in what were at the time of their arrival remote and uninhabited forest “jungle”.

The Department faces a major conundrum here. FD staff perceive “protection of the forests” of the country as one of their most important roles. The Department is very aware that giving any ground on the issue of land rights within the forest areas could lead to claims made throughout the entire forest system, not only by indigenous peoples, but by others as well. So the Department tends to take a hard line and not broach any discussion at all of land rights – or any other rights—for the indigenous peoples within the forest areas.

Avoiding land right claims gives a basis for maintaining distance from indigenous peoples, but is strengthened by a pervasive ethnic bias against them, a bias evident not just in the Department, but in the broader social context. The bias is evident in both subtle and overt
ways, most notably during interactions between Bengali staff and the indigenous peoples themselves. The depth of this cultural bias is such that it cannot be openly discussed, at least not in the context of a formal meeting such as those of the CMOs.

Within the CMO meetings at Nishorgo sites, indigenous individuals and groups do not receive the same treatment from other CMO members as do other people of Bengali origin. Many CMO meetings have included open criticism of indigenous peoples as a group, while more specific instances of bias have been evident in – for example – allocation of social forestry Benefits Sharing Agreements to non-indigenous peoples, even where indigenous people have legitimately resided in PA core zones and taken active roles in forest patrolling and protection. At both Lawachara NP and Rema-Kalenga WS, these lucrative Benefits Sharing Agreements went first to non-indigenous people, although the indigenous communities had directly taken on the role of protection through patrolling. This treatment of indigenous peoples puts them in a precarious position in the overall co-management process.

Although the biases described above do exist, the CMO structure has provided a forum – which did not exist earlier – in which grievances of minority and indigenous groups can be aired and possibly resolved at the PA site itself, without recourse to regional or national fora in which such issues can easily become politicized. The current and future evolution of collaborative management cannot be understood outside the context of the cultural and ethnic biases and perceptions of its participants, whether in the FD or in the CMOs.

(14) A unique confluence of poverty and high population density.

Other than a number of island states and urbanized enclave countries, Bangladesh is the most densely populated country in the world.\(^9\) The number of people per square kilometer in Bangladesh is more than three times that of Japan, Sri Lanka or El Salvador, five times that of the UK, Pakistan or Nepal, and 33 times that of Madagascar. The idea of “getting away into nature” in Bangladesh is only possible on a boat in the most remote edges of the Sundarbans Wildlife Sanctuaries. Even there, one does not go long before seeing a honey collector or a fisher. Elsewhere in Bangladesh, there literally is not a single forest that can be visited without finding someone in or passing through it.

The challenge of conserving forests and biodiversity in such a densely populated country is exacerbated by the pressures of poverty. Although by most estimates Bangladesh has witnessed a modest poverty reduction rate of around one percentage point a year since the early 1990s, poverty levels remain high. Two alternative estimates based on the Household Income and Expenditure Surveys (HIES) of the Bangladesh Bureau of Statistics show rural poverty levels declining from 58.7 percent in 1991/92 to 43.8 percent in 2005 (GOB, 2008). However, in spite of such progress, poverty levels remain high. Measured by food intake, the “extremely poor” (consuming less than 1,805 calories per day) totaled 23 percent of the national population,

\(^9\) On a population per hectare basis, only these countries are more densely populated than Bangladesh (noted in order starting with the most densely populated): Monaco; Singapore; Vatican City; Malta; and, Bermuda. World Resources Institute. 2007. EarthTrends: Environmental Information. Available at http://earthtrends.wri.org. Washington DC: World Resources Institute.
while the “absolute poor” (less than 2,122 calories per day) accounted for 49 percent of the population in 2000.

These high levels of poverty are associated with pressure on forest and other natural resources. Most noticeably at Nishorgo sites, tens of thousands of neighboring poor use the Protected Areas as a source of fuel wood. Every morning at Lawachara and Satchuri National Parks, a stream of poor women from neighboring villages and the nearby tea estates leave the PAs with fuel wood on their heads either for the long walk back to their homes, or to sell the wood to middlemen who await them at points just outside the Park. The same scene repeats itself at all the PAs around the country. Available natural resources, and particularly woody biomass, in the PAs are harvested wherever possible to meet the needs of those living nearby.

(15) Competing pressures from commercial extraction versus local household use.

This poverty, and images of the poor surviving in part on the extraction of woody biomass from forests, has provided a dominant backdrop for forest PA conservation programs such as Nishorgo. Nishorgo was designed to identify livelihood opportunities for those local stakeholders who heretofore had been extracting wood from the forests. Certainly, without direct engagement of such poor, the approach would not have progressed very far. However, this same focus on the poor households directly involved in forest extraction has in effect diverted attention and resources from the more intractable pressures of a commercial economy desperately in need of forest products.

Bangladesh’s per capita GDP grew at 3.4 percent per year during 2004-2007, and the overall GDP growth rate in the same period was 5.4 percent.10 Along with this growth there has been a constant increase in fuel wood demand and sales, and also an increased demand for teak and other hardwoods for furniture, boat-building and construction.

Observation from Nishorgo sites, and a number of studies undertaken on the fuel wood markets (especially Sultana 2007) have revealed that in PAs commercial extraction of fuel wood for sale exceeds in importance the amounts used by neighboring households themselves. At all the major northern pilot PAs (where per capita woody biomass levels are higher than in the south), trucks congregate at pre-determined points around the PA and then leave to sell their collected fuelwood at markets such as Comilla, Chittagong and Dhaka. From the small (243 hectare) Satchuri National Park, an estimated 2 tons of fuel wood is extracted every day, mostly by individuals who sell to traders operating trucks at collection points around the forest (Sultana, 2007: 110).

These high levels of commercial fuel wood extraction are driven by urban domestic cooking energy use patterns that rely more upon fuel wood than other energy sources. It is only in the two major cities of Dhaka and Chittagong where a significant number of households use gas (piped or bottled) for cooking. The fuel wood needs of millions of urban consumers need to be met, and the forest PAs provide a prime supply opportunity for businessmen, who pay local collectors to extract for them.

The pressure on forests from commercial logging cartels is equally intense. According to the Forest Department’s own register of illegal felling (generally an understatement of the real situation), the average annual number of trees illegally felled in Lawachara National Park in 1999 and 2000 was only 44. In 2004 and 2005, however, in this small Park of only 1250 hectares, the average number of trees illegally felled had risen by twenty seven times to an annual average of 1,188 (the illegal felling slowed rapidly after 2005, as community patrols began to be effective). The increased pressure on Lawachara and Rema Kalenga coincided with and was furthered by a gradual depletion of the available teak from other Reserve Forests in the Sylhet region, making the hardwoods remaining in the forest PAs increasingly valuable. The housing boom in Dhaka and Chittagong over the past decade, for which teak and other hardwoods are widely used, has exerted continued upward pressure on demand and prices.

The economy is also making intense demands on Protected Areas for fuel wood to fire brick making needed in this construction boom. Bricks are the primary building material in Bangladesh, and these are produced at thousands of brick kilns located throughout the country, many located in or near forest Protected Areas precisely so that they can take advantage of fuel wood as a primary energy source. Although both the Forest Act of 1927 and the Brick Burning Control Act explicitly prohibit the establishment or operation of brick fields in or within two kilometers of any Reserve Forest, these rules are often violated. In 2006, the Chunati Wildlife Sanctuary south of Chittagong had four brick fields operating within the actual boundaries of the Sanctuary, and another six located within a 2 km radius.

Understanding this critical factor – the scale and demands of a growing market economy on the forest PAs – has been central to adapting co-management under Nishorgo. Meeting the livelihood needs of local stakeholders was no less important than had been conceived at the beginning, but it became increasingly clear that such livelihood activities were only a beginning, or an entry point, to a larger challenge: mobilizing a subset of local stakeholders to break the commercial demands being placed on the forest PAs. This second challenge was inherently more confrontational, and more focused on power relations, than the initial focus on community-level collaborative management.

(16) The dramatic scale and speed of resource extraction.

Just how rapidly forests can disappear in Bangladesh – even when so few remain – is of an alacrity that would be shocking in many parts of the world. The loss of closed canopy forest at Chunati Wildlife Sanctuary is one of the best known examples of the pace at which forests can be transformed through extraction. Chunati was declared a Wildlife Sanctuary in 1988. There had not been extensive consultations with the people of the area prior to this declaration. Fears within neighboring communities about lost access to fuelwood or lowland rice growing in the Sanctuary were fueled by commercial interests that recognized the enormous riches offered by the closed canopy hardwood forest in the 7,700 hectares. The forest at that time was dominated by Garjan, a tree favored by boat-builders in nearby Chittagong. Within the short space of two years, the entire 7,700 hectares had been cleared, with only small patches of mature trees remaining. By 2003, when the Nishorgo project started, Chunati was largely covered in sungrass, with some scattered trees remaining.
A similar process of rapid forest loss occurred in the wake of the 1991 cyclone at Teknaf, after which the Government declared that fallen timber could be legally removed. With the door open to enter the forest for clearing of fallen timber, another dramatic process of forest destruction ensued, after which the entire middle portion of the Game Reserve was largely denuded. In the years just prior to Nishorgo’s launch, the pace of forest loss in the northern portion of Teknaf Wildlife Sanctuary met a similar fate, this time driven by the commercial demands for timber, and aided by the installation of brick fields to the north and east of the forest blocks. A remote sensing analysis conducted by the Nishorgo team showed that within an eight year period, 42 percent of “high” and “low” forest cover areas were converted to grasslands or agriculture.

Recognition of the risk of extremely rapid and organized forest loss informed the decision by the Government in 2007, after Cyclone Sidr passed through the Sundarbans, to prohibit any collection of deadwood within the Sanctuary boundaries. The Government at the time faced pressure from timber merchants in Khulna to allow them to enter the area to collect the “useless dead wood”. Had they succumbed to that pressure, it is likely that the eastern portions of the Sundarbans East Wildlife Sanctuary would now also be deforested.

The risk of such rapid, dramatic illicit felling of entire forests provides a contextual factor that informs the decisions of many involved with co-management, and particularly the Forest Department. Senior staff at the FD have seen how rapidly entire forests can disappear, and so are hesitant to take any risks that might allow such processes to be unleashed again.

(17) Protected Areas as domestic tourism destinations.

The Bangladesh Parjatan (tourism) Corporation organized a campaign to attract foreign tourists in the 1990s with the slogan “Come to Bangladesh before the Tourists Do”. Although the number of foreign tourists to nature areas has increased, that slow growth has been dwarfed by growth in internal domestic tourism, including tourism to natural areas.

The best evidence of rapid increases in domestic tourism has been at Cox’s Bazar, situated at the northernmost point of what is referred to in Bangladeshi tourist brochures as “the longest unbroken beach in the world”. On a given weekend between November and February, the town now receives more than 100,000 visitors, where in the early 1990s the town was still tiny, including only two government run hotels and a smattering of smaller hotels.

Beach and forest-related tourism at Cox Bazar is only the most well-known of the nature tourism outlets. Weekend bus outings to nature areas for families, schools and companies have become increasingly common as income has increased and…
people become aware of available nature destinations. Private nature “picnic sites” have sprung up around the country to meet this need, with the services offered generally limited to cooking or food service facilities, garbage dumpsters, merry-go-rounds and sometimes boating.

The Forest Department recognized this trend and capitalized on it by creating several mass-market nature tourism destination sites called Eco-Parks and Safari Parks. Examples include the Banshikali Eco-Park in Chunati Wildlife Sanctuary, the Dulhazara Safari Park (alternatively known as the Bangabhandu Safari Park), and the Sitakunda Eco-Park just north of Chittagong. The number of visitors to these nature areas continues to rise every year. By 2008, for example, the small 75 hectare Dulhazara Safari Park was receiving more than 20,000 paying visitors in a single day. Sitakunda Eco-Park received more than 50,000 paying visitors in a single holiday weekend. Recognizing the attraction of these nature visit opportunities to the local poor and middle class, the Forest Department has continued proposing new venues for Government-financed projects.11

This rapid growth in domestic nature-related tourism has had an important influence at Nishorgo sites. Visitation rates at Nishorgo sites increased dramatically as soon as communication efforts began to make it known that basic nature tourist facilities (guides, trails, facilities) were available at these sites. Lawachara National Park has been the most directly targeted, and by 2005 weekend traffic jams of tourist buses had become commonplace, with the consequent problems of litter, loud noise and eating inside the PA.

With even a moderate success in protecting forests and putting in place tourist facilities, the more accessible forest PAs in Bangladesh will rapidly receive a dramatic increase in numbers of nature tourist visits. This trend in domestic tourism represents both an opportunity (in particular for generating entry fee revenue for local communities) as well as a risk (for its negative impacts on biodiversity and ecosystems).

(18) Powerful cultural roots of a conservation ethic.

It is a seeming contradiction that the political and economic system in Bangladesh can have allowed such rapid forest destruction while the cultures of Bengalis and other ethnic groups of Bangladesh place such high value on nature’s beauty. Themes and images of nature’s beauty are woven throughout Tagore’s songs and poetry, including the national anthem. Tagore’s school, Shantiniketan, was among the first academic institutions in the world to experiment with the use of nature as an academic setting and a source of learning opportunities. Bengali poets, novelists and painters since Tagore’s time have not slowed in crafting images of natural beauty that themselves speak of a cultural affinity with nature. The close association of nature, culture and the divine in minority and indigenous ethnic traditions within Bangladesh has also been noted widely (Bitu 2008; Hossain and DeCosse 2009).

11 The term “Eco-Park” now has a negative connotation in the press, not least because of arguments made that the Forest Department had attempted to create an Eco-Park at Modhupur. In fact, that Government project there was not called an Eco-Park by the FD, but the term has nonetheless stuck. The problems encountered at Modhupur National Park were less associated with any confusion over an Eco-Park or National Park than they were with other longer term conflicts associated with land rights and ethnic issues. Similar conflicts arose around the Madhabkunda Eco-Park in Sylhet.
This cultural affinity with nature provides an opportunity to engage a broad cross-section of the population as allies in a conservation movement. During Nishorgo, evidence of this energy and commitment was clear in such outreach activities as those conducted with the young men and women in the Scouts of Bangladesh who, like many of their compatriots, were extraordinarily enthusiastic about conservation and ready to contribute to its success. Conservation efforts can enhance the likelihood of success by taking advantage of this energy and commitment.

Conclusion

The central aim of this chapter has been to offer an understanding of those factors that framed the co-management process and decisions supported by Nishorgo, but that were not fully apparent in 2003 as Nishorgo began. To this end, 18 “factors” have been identified, with six each affecting the neighboring communities, the Forest Department and the full range of stakeholders. A careful understanding of these 18 factors will provide a stronger foundation for anyone aiming to undertake forest PA conservation in Bangladesh in the future.

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