

Conclusions and Reflections on a Way Forward

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Elinor Ostrom has challenged the conventional wisdom that common property is poorly managed and should be either regulated by central authorities or privatized. Based on numerous studies of user-managed fish stocks, pastures, woods, lakes, and groundwater basins, Ostrom concludes that the outcomes are, more often than not, better than predicted by standard theories. She observes that resource users frequently develop sophisticated mechanisms for decision-making and rule enforcement to handle conflicts of interest, and she characterizes the rules that promote successful outcomes.

From the Nobel Prize Committee Announcement Awarding the 2010 Nobel Prize in Economic Sciences to Elinor Ostrom

The 2010 Nobel Prize award to Elinor Ostrom recognized not just her work, but the field of governance of commons that she did so much to advance. The central challenge of Nishorgo was one of establishing new institutions for the management of commons – the same set of issues that have driven Ostrom’s work. Access and use rights in the five state-property Nishorgo pilot sites were on paper governed by a complex set of social and legal rules, but to the casual observer in the 1990s these forests were in effect open access resources, without rules. By 2002, it had become clear that those rules were not working, at least in favor of solutions that allowed the resources (in this case forests within Protected Areas – PAs) to survive. So the single central and primary challenge of Nishorgo was to understand the existing institutions, including rules and norms, governing PAs and then find a solution that would enable fundamental changes in the governance system – including decision making, rights, informal rules, and formal institutions – that would sustain the natural resource base through a different social, political, and economic construct.

This closing chapter attempts to highlight the most salient conclusions and lessons that have emerged from the Nishorgo effort to change governance of forest PAs since it began in 2003. Because this book was framed from the outset by the relevance of Bangladesh’s PA management challenge for other countries, that global and – specifically – South Asian PA context for Nishorgo’s work is included in the opening section. The chapter then turns to four broad thematic areas under which key lessons and conclusions are identified: (1) the authority and roles of co-management organizations (CMO); (2) processes for capturing economic value generated by PA lands; (3) necessary internal changes to the Forest Department (FD), and; (4) supporting issues and approaches. From within these thematic areas, 25 recommendations (see box) are identified that outline a priority roadmap for continued improvements to the conservation and sustainable management of Bangladesh’s PA system.

Summary Recommendations for Improving Forest Protected Area (PA) Management

The Authority and Roles of Co-Management Organizations (CMO)

1. *Clarify and Further Codify Complementary Roles of the CMO and the Forest Department, Especially for Enforcement*
2. *The CMO Need to Play More Active and Leading Role in Coordinating Inputs and Resolving Conflicts Across the PA Landscape*
3. *Allow for a Greater Degree of Site-Specific Governing Solutions within the Co-Management Regulatory Framework*
4. *Assist in Creation of National Organization to Support PA Co-Managers*
5. *CMO Need to Prepare their Own Business Plans and Sustainability Plans*
6. *Secure Direct Financing for Community Patrol Group (CPG)*

Capturing Economic Value from Forest Department Lands

7. *Simplify Entry Fee-Sharing Process, Adjust Entry Fee Levels, and Allow Cross-Financing*
8. *Understand and Address the Political Economy Behind PA Entry Fee Auctions*
9. *Expand CMO-Led and Financed Social Forestry in Buffer Areas*
10. *Allow Participatory Enrichment and Re-vegetation Plantations in PA “Core Zones” as Part of Ecosystem Restoration*
11. *Consider Allowing CMO – and Community Patrol Groups (CPGs) in Particular – to Benefit Directly and Monetarily from Success in Halting Illegal Felling*
12. *Continue Exploring Means of Expanding Carbon Financing Projects*
13. *Prepare a Legal Framework Formally Allowing CMO to Benefit from Tourism-Related Economic Opportunities on PA Lands*
14. *Set a New Vision and Policy for Revenue Capture and Sharing from PA Lands*

Institutional Changes within the Forest Department

15. *Recognize and Accept Co-Management Organizations as the Principal PA Management Partner of the FD*
16. *Educate and Re-Orient Staff about the Department’s Primary Role as Service Provider Rather than Revenue Generator*
17. *Create a “Protected Areas and Biodiversity Management” Wing at Forest Department*
18. *Develop Capacity Development and Training Program for PA Managers Across All Levels of the FD*
19. *Establish and Maintain Common Standards Across All PA through Centralized FD Skills and Leadership*
20. *Explore New Modalities for Obtaining Feedback from the Public for PA Decisions and Plans*
21. *Meet 2004 Forest Policy Targets for new PAs totaling 152,000 hectares, and do so through Declaration of PA within Larger Multiple Use Reserve Forests*

Supporting Issues and Approaches

22. *Facilitate, Finance, and Encourage a Private Foundation Dedicated Primarily to the Protected Area System*
23. *Co-Management Organizations Should Target the “Marginalized” Rather than the “Poor”*
24. *The FD and Researchers Need to Develop Knowledge Management Priorities and Strategies for the PA System*
25. *Extend Efforts to Develop a Unified and Widely Recognized “Brand” for a National Network of Protected Areas*

Participatory PA Co-Management in Bangladesh in an Evolving National, Regional and Global Context

The prevailing understanding of conservation 30 years ago in Bangladesh was a relatively simple one compared to today. The Forest Department was assumed to be owner, manager, and authority for all that occurred within the PA boundaries. Papers prepared for the 1984 “First International Seminar Cum Workshop for the Conservation of Wildlife in Bangladesh” (German Cultural Institute, 1986) convey the tone at the time. The authors of the 20 papers in that volume scarcely mention those living already within the boundaries of Protected Areas, and no consideration is given by any of the authors to formal processes for resolving conflicts over the PA. Rather, the collection of papers focuses almost exclusively on wildlife status reports and a set of silvicultural and zoological priorities for conservation.

One participant in that workshop, however, presciently recognized the social and political challenges that were already occurring, and would worsen. The then-Deputy Conservator of Forests, wrote about the “frequent occurrence of entrepreneurial encroachment where wealthy persons use landless people as an instrument in encroachment” and cited the often “powerful patronage in the background.” And he recognized that it occurred commonly that “politicians make populist and alluring approaches by telling people to start to settle in the forest land and that they will provide wherever required necessary protection in return of votes.” In making these observations, he summarized the complex governance challenge in which “the local politicians and the rural elites are using the landless as an instrument or tool to (a) earn money and (b) to acquire land in the long run” (Howlader: 1984).



PA management has evolved steadily in recent decades, with a greater emphasis placed upon collaboration, transparency and benefits sharing with neighboring populations. This group of women in West Bengal State of India explain their involvement in PA management.
[Utpal Dutta]

In spite of the foresight of this one senior FD staff member at the time, no changes were made in Bangladesh’s PA management rules and practices that would address the social and political conflicts over common property rights until much later in 2003, when the FD initiated the Nishorgo project.

Other countries have developed their framework for participatory PA management at a pace quite different from that of Bangladesh. Deardon et al (2005) reviewed the evolution in PA management across 41 countries from around the world from the period 1992 through 2002. During that 10-year period coinciding with the lead-up to Nishorgo, he identified “overall trends toward increased participation of more stakeholders, greater use of formal accountability mechanisms, and a wider range of participatory techniques,” with 75% of the countries stating that legislative improvements had been undertaken in the period. In 1992, governments were

understood to be the “sole decision-making authority” in 42% of the responding agencies. By 2002, that number had fallen to only 12%, with many co-management structures emerging.

Deardon et al also reported an increased level of private sector involvement in PA management, particularly in the development of tourism opportunities. They also reported an increased proportion of countries publishing annual State of the Protected Areas reviews and undergoing external audits, both important measures of transparency and accountability. Global trends in managing PA entry fees also changed rapidly during this period. In 1992, nearly 100% of countries surveyed sent collected PA entry fees to the central treasury, while by 2002 46% of the surveyed agencies had received authority to either directly retain PA receipts or allocate a pre-determined portion to communities.

In this same decade preceding Nishorgo’s initiation, other South Asian countries also improved their participatory PA management frameworks relatively more rapidly than Bangladesh. In reviews of PA management in South Asia (Sharma and Yonzon, 2002; Kothari et al, 1998; Kothari, 2003), Bangladesh is characterized by a relatively greater degree of state control, limited recognition of the roles and rights of local populations, and a context in which indigenous and local populations had no formal role in or benefits from PA management.

Between 2003 and 2009, participatory PA rules, practices and standards changed considerably in Bangladesh. Formal co-management organizations were created and recognized under regulatory instruments. Rules allowing the retention of PA entry fees by co-management organizations and communities were being implemented. Income-generating investments both inside and surrounding PAs were taking place and generating benefits for PA co-management participants. And scientific evidence at co-managed forest PA sites showed that biodiversity was increasing as pressures on core areas were slowed.

Identifying Lessons, Conclusions and Recommendations for a Way Forward

The progress in PA co-management of recent years in Bangladesh should not belie the significant opportunities for further improvement. In the remainder of this chapter, seven priority thematic areas are reviewed. While some limited progress may be noted, the primary emphasis of the chapter is the identification of critical next steps based on the lessons learned and articulated throughout this book.

This book is not the first attempt to draw lessons learned and recommendations from the Nishorgo project. In late 2008, as the field work of the Nishorgo project drew to a close (and a follow-on project got under way), those staff members that had been directly involved in day-to-day implementation identified a set of 10 priority recommendations for improving the implementation of the PA co-management process (see box at next page). Those “operational” recommendations were directed to the teams implementing co-management at the field level. They were informed also by the inputs of other Nishorgo project reviews, such as Alam and Momen (2008).

By contrast with these more field-focused operational recommendations, the conclusions and recommendations identified throughout the remainder of the chapter aim to be broader

and more strategic. And they aim to help in setting an agenda for change and improvement that goes beyond the PAs and communities for whom these operational recommendations were intended.

The Authority and Roles of Co-Management Organizations (CMO)

Co-management organizations have become established and begun to take hold at Nishorgo pilot sites. They are increasingly recognized by the Forest Department, local government bodies and neighboring PA stakeholders as a governing body that must be engaged in decisions concerning the PA. In spite of progress in this regard, the CMO are not yet the nucleus and starting point for decision-making about the PAs. Forest Department staff have not yet systematically recognized or accepted the central role that CMO can and should play in ensuring conservation of PAs. Even community members themselves do not yet fully believe in the importance of the CMO for PA conservation.

Ten Priority Operational Recommendations from the December, 2008 Workshop Closing the Nishorgo Project

- #1: The primary work of the entire project team needs to organize around active, challenging, dynamic and conflictual governance of PA by co-managers. Co-Management Organizations need now to stand up, demand their rights and take action.
- #2: Any revenue from forest lands must be directed as remuneration to those that are directly protecting the forest.
- #3: Seize opportunities for generating revenue from Forest Land.
- #4: Take formal steps to restructure/reorganize the FD around PA landscapes.
- #5: Mobilize groups of the poor and marginalized to develop their own voice, issues and demands.
- #6: Co-managers need to understand the expected roles and responsibilities of FD staff and hold them to it.
- #7: FD at multiple levels must be actively a part of CMOs, both formally and informally.
- #8: Build on the alternative income generation activities already established and expand through value chain approaches.
- #9: All PA-specific activities should be executed through and with CMOs.
- #10: Training opportunities in conservation management need to be expanded to both FD and co-managers.

A number of lessons and recommendations have emerged that would help in more firmly clarifying and establishing the roles and authorities of the CMO around forest PAs.

1. Clarify and Further Codify Complementary Roles of the CMO and the Forest Department, Especially for Enforcement

Since their creation, the roles and responsibilities of CMO have gradually become clearer and more distinguishable from the roles of the FD staff team at a given PA. In accordance with the Government Orders (GO) establishing the CMO, the FD staff members in charge of a Forest Range serve as Member Secretaries of the CMO, and so it seems plausible to think of the FD and the CMO as integrated entities at the PA level. But such is generally not yet the case. Often, FD staff members speak of the CMO as though the FD was not represented there, and the other CMO members speak of the FD as a separate and external organization.

The roles of CMO were initially articulated in the first co-management Government Order, and have been further refined through the second GO for co-management, and through a number



In the moist tropical environment, infrastructure within the PA -- such as this raised trail at Teknaf Game Reserve -- require regular maintenance. Responsibilities between FD staff and CMO for activities such as this are not yet sufficiently clear. [Philip J. DeCosse]

of guidelines for specific activities, most notably the entry fee collection process. But a lack of clarity remains about those actions for which the FD as an institution should take primary responsibility and those that should be led by the CMO as a whole, or by the non-FD members of the CMO.

The lack of clarity about roles for these important processes can have serious repercussions at PA level, with both FD staff and CMO leaders pointing their fingers at the other as the cause of poor management of tourists, patrolling, infrastructure maintenance, and forest management. The confusion about roles is exacerbated by a desire – from both the

FD and the CMO – to make a clear distinction between their respective roles: the CMO (in which many FD staff perceive little or no attachment) and the PA-level FD staff itself, with its own government budgets and processes. Hence the attitudes and understanding of the co-management stakeholders tend to separate out government and civil society roles in PA management. And yet these stakeholders must work together closely if conservation is to succeed. The CMO were expected to be the common decision-making forum that would bring FD and local people together, and that common decision-making has happened in some cases when FD staff members have been open to it, but it has not been the norm.

The best example of this necessity for collaboration and coordination is evident for forest patrolling and protection. Forest protection will not succeed if it is only executed by the FD guards – that much had been demonstrated during the years leading up to the Nishorgo pilot. Without some complementary community patrol and broad community support, the pressure on the forest will remain greater than anything the FD can control. And yet new Community Patrol Groups do not have the formal authority to apprehend suspected thieves, or seize stolen materials. Those powers rest with FD staff, per the Wildlife Act and Forest Act, and other legal instruments. If patrolling is to be successful, the CMO and FD must work together more closely, but with the responsibilities of each clearly defined. These roles have been clarified to a degree during the Nishorgo pilot (e.g., in CPG guidelines), but more and urgent work is required, and particularly with regards to enforcement. The authorities of the CMO to sanction CPG operation or to take action concerning allegations of an errant Forest Guard, are at present insufficiently clear.

The same is true in the area of tourist management. The numbers of FD are not sufficient to manage the thousands of visitors, buses, and cars that arrive at some PAs. Community members, delegated by the CMO, can assist in this process, but they have no formal authority to arrest, detain or punish tourists behaving inappropriately. It is urgent to clarify the roles of CMO-delegated individuals helping to manage tourists. And it is particularly urgent that the

enforcement authorities of CMO-delegated individuals are made clear both to the FD and to tourists themselves.

Other critical areas needing clearer distinction of roles and responsibilities between CMO and FD include the maintenance of tourist-related PA infrastructure (signboards, tourist facilities, interpretation centers) and the implementation of the forest management activities included in PA management plans and annual FD budgets (especially those that offer economic opportunities (jobs, social forestry, off take opportunities to local populations).

The challenge is not to increase the policing authority of the FD – those authorities are already sufficiently strong in the Wildlife Act and Forest Act. Rather, the FD challenge is to work with and within the CMO to delegate and empower the community co-managers with specific enforcement responsibilities.

However it is executed, the CMO must be perceived by the broader community, and local government, as having clear authorities in select areas, and particularly in the four areas identified here. This is consistent with the findings of Barrett et al (2001) in their review of conservation management, who noted that conservation organizations at PA level need in particular to have the “authority, ability and willingness to restrict access and use.”

Efforts to codify roles and responsibilities is indeed an urgent priority, but it must be noted that the legalistic and technical process of distinguishing responsibilities is made far more effective when and where FD staff at PA level are fully committed to the existence and overall value of a collaborative management structure such as the CMO. During Nishorgo’s pilot work, confusion about roles between FD and CMO was less where FD staff maintained good relations with CMO leaders, and worked to strengthen their capacity. Where this good will and mutual self-interest is absent, the process of distinguishing roles will take longer and be less effective.

2. The CMO Need to Play More Active and Leading Role in Coordinating Inputs and Resolving Conflicts Across the PA Landscape

When the CMO were initially being established under Nishorgo, the most pressing initial need was for the CMO to serve as a public and inclusive forum to hear the diverse needs of PA stakeholders. In light of that priority, relatively less attention has been paid to deliberate interaction with non-CMO institutions in the PA landscape whose active involvement could ensure improvements to the PA. The Ministry of Lands, without whose support few changes can be made at the local level, has rarely been invited by CMO to engage in PA issues. Representatives of the courts – the key institution responsible



Given the large populations of people and diversity of resources present in the immediate vicinity of the PAs, it is critical that CMOs allocate time to engage as leading organizations within their landscapes. [Sirajul Hossain]

for processing of forest theft cases – have also rarely been included in CMO meetings. The Border Guard of Bangladesh (the border patrol force) is quartered in or near all three of the northern Nishorgo pilot sites, with important impacts on these forest PAs, and yet they do also not regularly take part in CMO meetings or processes. Perhaps most importantly, the Deputy Commissioners (DCs) were rarely directly approached by CMO during the five-year initial period of Nishorgo. And yet the DCs are considered among the most important representative of the central Government within any given district of Bangladesh. The CMO need to place a greater priority on the role of coordination across public and private institutions operating in the PA landscape, ensuring in the process that resources available to the PA are delivered and that conflicts are addressed. And the CMO need to be more activist, demanding and forthright in their dialogue with public and private authorities around the PA, with the senior staff of the FD, and with interested regional and national authorities. They have not yet, but should, form delegations from individual PA, or perhaps including representatives of multiple affected PA, to visit regional or national figures, including the Chief Conservator of Forests, newspaper representatives, Ministerial officials, and other persons of influence.

3. Allow for a Greater Degree of Site-Specific Governing Solutions within the Co-Management Regulatory Framework

When the Nishorgo effort began, co-management was entirely new to the Forest Department and to the Ministry of Environment and Forests that had to approve proposals to allow for the power-sharing co-management implied. In order to ensure passage and acceptance of these new ideas in the initial Government Order, the Nishorgo team considered it necessary to propose a one-size-fits-all approach to the co-management governing structure. At each of the five pilot PA, the structure allowed for a fixed number of CMO members from identified stakeholder groups. The second and revised Government Order has introduced some degree of flexibility.

But it is still the case that the pre-ordained CMO structure at times results in a governing body that mixes strongly associated local stakeholders (immediately adjacent villages and towns) with others that have a minimal stake in the PA.

Internationally, the World Bank has recognized the importance of allowing different contexts as forest management agreements are being designed, and the shortcomings of a one-size-fits-all approach, while recognizing also that there is “no perfect model for contracts” (World Bank 2009: 41).

In Bangladesh, providing for flexibility of governance structure at site level should remain a priority as new PA sites move under co-management. Research efforts should now focus on a review of CMO experiences to date, proposing more efficient and fairly representative governance structures. Future codification of co-management in a revised Wildlife Act or new rules should allow governance structures to be adjusted by site.

4. Assist in Creation of National Organization to Support PA Co-Managers

As Nishorgo ended, there existed no national level organization representing co-management organizations at site level. Fabricus et al (2004) argued that successful co-managers are

distinguished by an ability to create “nested institutions across scales” that can help them to achieve common goals. In order for site level PA co-management to be sustained as a model for conservation, stronger national networks of co-managers will need to evolve to support site level work.

As early as 1984, conservationists had proposed a “National Board of Nature and Wildlife Conservation Trust,” which was to have had the Government bequeath it a number of PA to manage, with membership in the trust coming from conservationists, NGOs, and organizers, wealthy wildlife lovers, research scholars, and dedicated field workers (Karim, 1986). This sort of private national level organization never took hold. Newer national organizations, such as the Arannayk Foundation and the Wildlife Trust of Bangladesh, assist in national efforts to improve biodiversity conservation and forest management, but are not defined by explicit commitments to the forest PA system, nor to PA co-managers. The only national body authorized by PA regulation to engage in PA system-wide issues is the Wildlife Advisory Board, constituted under the Wildlife Act, but the Board was designed as a platform for government dialogue and decision-making, not for private organizations.

5. CMO Need to Prepare their Own Business Plans and Sustainability Plans

At the 2005 Public Private Round Table at the Radisson Hotel in Dhaka, private business leaders had proposed that each PA should have its own business plan clarifying detailed revenue, visitor numbers, costs, and investment plans, so that private investors could better understand the business climate at each PA and understand opportunities for complementary investment in neighboring landscapes. The CMO have made many improvements in their budgeting and planning processes in the interim, and now maintain annual budgets. But, to date, those budgets do not include the detail concerning expected revenues and other variables implied by a business plan. Nor do they yet include specific plans for ensuring financial sustainability. It is this forward-looking business vision that is now required at all the PA. And, unlike current CMO budgets, business plans need to include all possible sources of revenue and costs. Fees from parking, picnic site management, eco-cottage contributions, and similarly minor receipts should all be included, as they are likely to grow in importance in coming years. And the plans should be developed in close coordination with FD staff at local and national levels. This kind of business plan will be particularly helpful as the CMO directly apply for complementary financing sources from donors or foundations.

6. Secure Direct Financing for Community Patrol Group

No expenditure is more important to securing the legitimacy of the CMO than resources allocated for PA protection. FD staff are financed from FD budgets, but the Nishorgo pilot has demonstrated the enhanced effectiveness of protection when community members are also engaged in the process in Community Patrol Groups. As the Nishorgo pilot ended, a number of CPG were not receiving any direct remuneration, but continued patrolling – for reasons associated with social status and also in the expectation of future benefits. Remuneration levels and methods for CPG members were not consistent across all sites, nor need they be, as long as they are perceived as fair in each area.



Continued direct benefits need to be secured for those men and women protecting the PA. Here, women patrol at Lawachara National Park. [Sirajul Hossain]

New and more secure financing sources for CPG need to be identified and obtained. In-kind and in-cash benefits from social forestry in buffer area Reserve Forests, habitat restoration operations within the boundaries of the PA, and work opportunities associated with the PA need to be allocated first and foremost to the CPG members. A central “CPG Endowment Fund” should be put in place to provide support for CPG groups and members, and particularly those CPG at sites that do not generate significant entry fee receipts but which are particularly important for biodiversity conservation (e.g., Rema Kalenga Wildlife Sanctuary).

This central fund should allow for financial support to those CPG members injured in the line of duty. The fund can be used to provide allowances for CPG members, although – as a fund established from government revenues – it could not provide explicitly for salaries.

Capturing Economic Value from Forest Department Lands

The Nishorgo team followed an approach that gave priority to direct over indirect incentives for conservation (see Chapter 12 on approach to creating alternative incentives). The team recognized that simply creating new livelihood opportunities for people around the PA (via the suite of “Alternative Income Generating [AIG]” options such as poultry and livestock rearing, farming and small businesses) would not create sufficiently strong direct incentives for conservation of core PA areas, not just because the marginal benefits of such new opportunities were small, but also because receiving income from those activities did not preclude recipients from doing future harm to the PA. The project would have to directly capture value from the Forest Department PA lands themselves, and would have to link receipt of those benefits to conservation. Leading opportunities for generating direct financial benefits included shared tourist entry fees, buffer area social forestry, shared off-take from forest management practices and carbon revenue. The project succeeded in improving revenue capture in each of these areas, or the prospects for capture, but much remains to be done. The following recommendations would help ensure that value is harnessed from FD land in a way that supports neighboring communities and sustains conservation.

7. Simplify Entry Fee Sharing Process, Adjust Entry Fee Levels and Allow Cross-Financing

A system is now in place to direct 50% of PA entry fee revenues to the CMO. The approved process requires that the CMO financing arrangements be formally included in the Government budgeting process, and this official and explicit recognition of the CMO represents an important step in making co-management a permanent feature of PA management. The entry fee sharing process also creates a strong basis for sustained financing of PA management and benefits sharing with CMO.

The entry fee sharing process, however, can be improved. Presently, CMO are not receiving the money until a year after fee collection, and only then through a budget allocation process overseen by the Divisional Forest Officer (DFO). The delay in receipt of revenues discourages the CMO and the CPG in their work. The process needs to become simpler and more rapid, linking collected entry fees to benefits received by the CMO and the CPG. A dialogue between the FD and CMO about how the process has evolved to date would be a good place to start.

Reviewing overall entry fee levels and entry fee policy is a pressing need. With visitor numbers rising so high as to damage the visitor experience and in some cases the PA ecology, as for example in the high season in Lawachara National Park, the Mochoni area within Teknaf Game Reserve, and Satchari National Park, it is now time to develop a more strategic use of the entry fee process and entry fee levels. The entry fee level for Bangladesh citizens (now Taka 10, or USD 0.14 at most PA) is low by any international standards, but was initially set at this low level by the FD because that was the highest level then considered politically acceptable. The entry fee should be increased, as it would help to control visitor numbers while capturing more revenue for PA management. Entry fee willingness-to-pay and travel cost studies (Haque 2007 and Khan 2003) have demonstrated that visitors are willing to pay entry fees well above this level where suitable visitor facilities are in place. These studies and the experience gained in entry fee management to date should now urgently be capitalized upon in a strategic review of all aspects of entry fee management.

Earlier proposals to allow 50% of PA entry fees to be retained locally at time of transaction should also be reconsidered. This local retention of forest revenue is a standard and legally recognized practice with the Tree Farming Fund and benefits sharing processes under social forestry. Proposals to apply this same local retention approach to PA entry fees were not accepted by the Government earlier, but should be revisited as a way of improving the conservation incentives associated with entry fee sharing.

One important issue to address in such a study is the need to consider cross-financing from more visited and popular PA sites to those that are less visited but of special importance for biodiversity conservation. Formal processes need to be in place to ensure financing of CPGs in particular at less-visited sites. To this end of supporting cross-financing, some portion of fees collected from heavily visited PA should be directed to a “Special Community Patrol Fund” for use by CPG at any PA at which urgent or supplementary payments are needed. Operationalizing this would also depend on the higher level of co-management coordination discussed earlier, so that the representatives of all CMO could decide on the allocation of grants from such a common or special fund.

8. Understand and Address the Political Economy Behind PA Entry Fee Auctions

The assumption that the FD and other co-managers should together be responsible for entry fee collection underlies efforts to improve entry fee management at co-managed PAs. Running contrary to this, however, is another separate trend within the Government towards removing control of the FD and other co-managers over the entry fee collection process and auctioning it to private contractors. Throughout the country, patches of FD land have been walled in and turned into “Eco-Parks” (the most commonly used name) with physical tourist infrastructure



Rapid increases in visitor numbers to PA sites will continue, heightening the importance of a clear policy position on who should benefit from those increases.
[Nishorgo Support Project]

(concrete walkways, bridges, and children's play areas). Associated with these Eco-Park projects is an entry fee. But unlike the entry fees at Nishorgo's co-managed sites, entry fees in Eco-Parks are managed entirely by private contractors. The contractors receive collection rights after a bidding process managed by the central government, with the winning bids paid to the central Treasury.

The two processes – entry fee sharing with CMO at Nishorgo sites and privatization with centralized revenue capture at other select PA sites (especially Eco-Parks) – represent conflicting paradigms of PA management and financing. And, as the number of private contractors benefitting

from the entry fee collection businesses grows, the voice of opposition to entry fee sharing with CMO is becoming stronger, as contractors lobby directly to the Government to create new business opportunities through new Eco-Park projects around the country.

Those supporting a philosophy and approach of co-management, where that implies an involvement of neighboring communities in benefits from the PA system, need to understand the political economy of this entry fee collection contracting and take a stand against it. At one level, a broader discussion is needed within the FD and the public about whether creating "Eco-parks" as nature tourist destinations separate from the rest of the PA system is good for conservation in general. But of equal importance is the broader discussion about who should benefit from the natural tourism value of FD PA lands. And who should take responsibility for ensuring protection and conservation of PA lands? Should neighboring communities – through the CMO – be priority beneficiaries, through entry fee sharing in particular? Or should outside parties (such as private entry fee collection contractors) be the major beneficiary? Co-management is threatened by the trend to auction away the rights and the benefits from PA entry fee collection to private contractors, as that auctioning and contracting process separates the role of protecting and caring for the PA from the role of benefitting financially from the PA.

9. Expand CMO-Led and Financed Social Forestry in Buffer Areas

PA entry fees represent only a portion of the revenues that can be generated by PA lands, and entry fees in any case typically pale against the value of timber and other forest resources. The FD has greatly improved opportunities for communities to benefit from timber in its revisions of the Social Forestry Rules. Under those changes, community organizations are now allowed to invest capital and labor in social forestry on Reserve Forest lands. Expansion of community-driven and CMO-guided social forestry within the PA – where this does not adversely impact the biodiversity value of the PA – and in neighboring Reserve Forests has the scope to be a central feature of co-management in the future.

But allowing communities to invest directly within Reserve Forest lands, without any financial contribution by the Forest Department, represents a dramatic change of roles for Range and Beat Officers in particular. Across the country, few of them are ready to allow or encourage community investment to protect degraded lands, and would in most cases prefer to control the process entirely themselves. The full and active participation of these field level officers and staff is a necessary pre-requisite to expansion of CMO-led social forestry. And without a dramatic expansion of this particular new innovation, it is difficult to imagine that PA buffer areas around the country will provide the long-term benefits that would make PA co-management sustainable in the coming decades.

10. Allow Participatory Enrichment and Re-vegetation Plantations in PA “Core Zones” as Part of Ecosystem Restoration

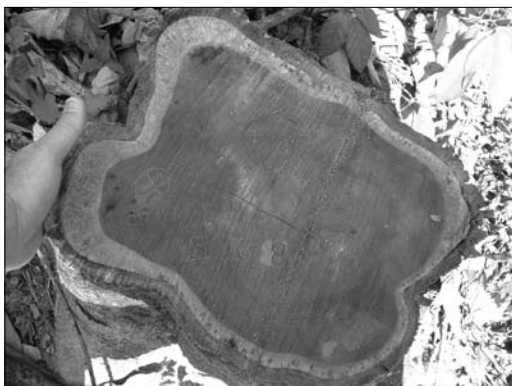
The optimal approach for sharing timber revenue under co-management is for the CMO to organize social forestry plots within Reserve Forest land immediately adjacent to the PAs. CPG members or other stakeholders receive social forestry plots in return for their involvement in PA conservation efforts. Many PA, however, do not have any adjacent Reserve Forest land that could be used for this kind of remuneration to community members. The central portion of the Teknaf Game Reserve is one among many examples. At present, those working to protect the heavily degraded Teknaf PA cannot be remunerated with social forestry plots near their homes, since no such Reserve Forest lands exist.

In response to such situations – where core zones are heavily degraded and no nearby options exist for using social forestry in buffer Reserve Forests – the Nishorgo team proposed a solution allowing a special type of social forestry in the core zones themselves. Under the model, identified patches of degraded forest land within core zones would be assigned to a CPG, and a mix of fast growing (e.g. sissoo and albizia) and slower growing native species (e.g., garjan, chukrasi) would be established. After the 10-15 year harvest period for fast-growing species, the native species would be left to continue the ecological restoration process.

While advanced by senior FD staff themselves, this proposal for core zone ecological restoration, including shared benefits met with resistance from inside the FD on the grounds that the Wildlife Act prohibits anyone from benefitting from timber taken from PA core zones. This solution has been proposed, however, as part of a proposed set of “Protected Area Rules,” but passage is not yet assured. The objective of establishing such ecological restoration allowing benefits sharing with CPG should remain a priority until they are approved. Without this sort of direct community involvement in mixed reforestation and re-vegetation in degraded core zone areas, it is unlikely that efforts to reforest degraded PA lands will succeed in the near future.

11. Consider Allowing CMO – and Community Patrol Groups in Particular – to Benefit Directly and Monetarily from Success in Halting Illegal Felling

The more direct and well-aligned the incentive, the more significant the response. Can an incentive be created for the CPG that directly aligns success in their core role (keeping trees from being felled) with the amount of their remuneration? The Nishorgo team was able to put in place a number of incentives for CMO and their CPG, primarily through opportunities



When timber is illegally felled within the PA, it benefits only those that stole it. As part of a process of ecological restoration, CPG might benefit directly from gradual removal of non-native trees, such as Teak.
[Philip J. DeCosse]

to capture revenue from entry fees, social forestry opportunities or participation in growth of nature tourism.

The Nishorgo team also discussed a more ambitious, and politically sensitive, option for linking success in patrolling to the level of remuneration: allowing the CPG to benefit from sale of small amounts of extremely high value exotic timber from the PA. The search for a more direct incentive for patrollers stemmed from a recognition that any revenue associated with non-timber opportunities would pale against those earned by illegal fellers extracting teak and other commercially valuable timber from the PA. With a single 40-year old teak tree valued at approximately

\$2,000 at stump, it was difficult to conceive of the modest entry fees or tourism opportunities serving as a sufficient incentive to CPG by comparison. Barrett and Lybbert (2000: 293) were not alone in recognizing that revenue from ecotourism, bio-prospecting, and marketing of non-timber forest products (NTFP) are “relatively meager sums compared to timber.” In his review of co-management in Bangladesh, Kotagama (2006) accepted the inability over time for communities to stop the illegal extraction of commercially valuable hardwoods (such as teak). He proposed allowing communities to benefit from the slow and gradual harvesting of mature trees over time, thus adding on more significant benefit streams from FD lands as an incentive to forest conservation, while better controlling the ecological restoration process as over-mature timber is replaced by native species naturally.

The right of the CMO and CPG to cut down a limited number of over-mature trees per year could be subject to their success in patrolling and protecting the PA. Success in patrolling might be reviewed on a quarterly basis, based on commonly agreed upon success metrics, principally that no more than a predetermined number of trees had been illegally felled in the prior quarter. The quarterly review and selective felling process could be publicly monitored, and might even become a major public and celebratory event for the CMO, as they celebrate both success in conservation and the benefits that accrue from the success.

What those that have objected to this approach have forgotten, however, is that the basis for it is already included in approved PA management plans. Those plans already call for the gradual replacement of exotic species such as teak over time by a mix of native species, regenerating naturally. The irony of the present status is that over-mature trees including exotics are now being removed, but the only ones to benefit from that removal are illegal loggers. If exotic trees are to be removed from the PA as a process of ecological restoration, it should be the CMO and CPG that benefit, not the illegal loggers. Processes should be identified to make this direct incentive a reality.

12. Continue Exploring Means of Expanding Carbon Financing Projects

The revenue streams now being generated from the PA and surrounding forest is only a portion of the total economic value of those forests. As carbon markets haltingly develop globally, new revenue capture opportunities will continue to arise for CMO linked with ensuring carbon capture. The Nishorgo team improved the capacity of FD and other specialists to design carbon offset projects, and to measure the amounts of carbon within forest PAs. Eventually, the sequestration of carbon in forests is likely to generate a new and significant revenue stream in Bangladesh, so efforts should continue to build these skills, both at FD and CMO levels, and amongst other technicians.

13. Prepare a Legal Framework Formally Allowing CMO to Benefit from Tourism-Related Economic Opportunities on PA Lands

Nishorgo demonstrated proof of concept in having communities benefit from kiosks at PA entry areas, sales of gift items, and operation of picnic sites bordering PAs. Yet some FD staff – and other government staff – hesitate to formally allow these activities, on the stated grounds that any revenue earned on or from Government lands must be collected and sent to the central Treasury. In other areas (such as at Eco-Parks) the FD allows concession contracts on FD land, but these concessions are obtained only through payment to the Treasury. Without change in relevant regulatory instruments, CMO will not be able to capture revenue from tourist interest at the sites they are working to protect. The CMO are the optimal organizations for benefiting from managing student dormitories, new visitor centers, tourist kiosks or picnic grounds. Policy change to formalize these rights is best done initially in a Government Order, formalized later in a Rule for additionally legal support.

14. Set a New Vision and Policy for Revenue Capture and Sharing from PA Lands

The Nishorgo effort piloted innovative processes by which the CMO could benefit directly from the Government's PA lands. Those new opportunities for CMO benefit have been formalized in a variety of regulatory instruments such as Government Orders, Government project documents, and formal letters from the Government. But it is now time to set a clear and compelling policy and vision for revenue capture from PA lands, and for the role of co-management organizations in benefitting from that capture. The fundamental principle behind a new unified vision and policy need to be clear: that those neighboring communities working to protect valuable PA assets and services should benefit directly from their protection work.

Institutional Changes within the Forest Department

Citizens living around the PA regularly state that if the FD wants co-management to work, then it will (DeCosse and Huda: 2006). The FD has unusually expansive authorities within the boundaries of FD lands. But, ironically, this power of the FD can only be successfully exercised if it is used to build networks of support with stakeholders outside the FD. Without the involvement of neighboring communities through the network of CMO, the FD will not succeed. It is this pre-eminent importance of the FD that drove so much work under Nishorgo to strengthen the organization. But institutional change in any large organization takes time. Policies, guidelines, incentives, rules and processes are developed to set an altered course, but

initially only a small number of staff adopt the new approach, often led by senior staff with vision and leadership. This gradual growth, led by a few champions, has been the brief and still-evolving story of institutional change around co-management at the FD. The conclusions and recommendations noted here aim to provide a blueprint for continued change within the FD.

15. Recognize and Accept Co-Management Organizations as the Principal PA Management Partner of the FD

During Nishorgo's development, many DFOs, Range Officers, and other field staff have perceived the emerging CMO as threats, and have sometimes worked to undermine them. Initially, Range Officers and Beat Officers across all Nishorgo pilot sites made a point of working only with "our people," a euphemism for those well-established local groups, typically with no relation to the new CMO, but under easy control of FD officers and staff.



If the steady removal of timber from the PA is to be reversed, then the FD will need to rely on the social networks and authority of the CMO. [Sirajul Hossain]

Any hope for lasting conservation of PA forests requires that the Department build a stronger supporting social network than the ad hoc collection of "our people" with whom the FD had worked in the past. Co-management is central to the FD's future success as a PA management leader in Bangladesh not because it is a just or egalitarian way of working, but because the FD cannot succeed without it. Not enough staff of the FD have recognized this. Without the alliances that CMO in particular can provide, then the FD will increasingly lose not only the forests they are responsible for protecting,

but also their credibility as a conservation organization. The CMO are the viable social and political entity to which local individuals and bodies will turn (and are turning) when the need arises to interact with the PA "managers." Many within the FD have not realized this yet.

Politicians have begun to recognize the value of channeling entry fees and other benefits to neighboring communities around the PAs, most notably around the Sundarbans. As resources associated with PAs become available, the question arises of who should receive and manage those resources. The FD acting alone will not be accepted in this role by donors, project designers or even the central government. A recognized and acceptable conduit will be necessary for any such resources to go to the communities. And it is precisely the CMO that can play this role. The CMO are now constituted and legally recognized at an increasing number of PA sites. Only if the FD recognizes them, works with them, and builds their strength, will they be able to play their key role in PA management and benefits sharing. Only if that role is executed effectively will the FD be able to meet its own objectives of securing the PA system for the present and future.

This change of FD staff opinion and perspectives on the value of the CMO will only come when the change is driven from within. To date, support for the CMO is not yet fully embedded in the FD's culture and vision. Sensitization, awareness-raising, and a change of vision will take place when senior FD staff themselves advocate internally for the practicality of working with and through CMO and of supporting people-based management of PA.

16. Educate and Re-Orient Staff about the Department's Primary Role as Service Provider Rather than Revenue Generator

In spite of policy and strategy changes that have taken place within the Government, it remains the case that most senior staff of the FD perceive their primary role as one of revenue-generator for the Treasury. Within the territorial divisions of the FD, DFOs now have a clear idea of the revenue targets they should meet each year from felling and collection of fines and fees. When critical operational decisions are made in the planning process of the FD, the need to meet perceived annual revenue targets remains a central driver of decisions regarding staffing, felling rotations, and allocation of resources and time of staff. This focus on revenue targets is certainly counter-productive for the staff with responsibilities for managing the PA system. Any staff member who has responsibilities for both territorial forest and PA forest will spend more time on the territorial forest, since revenue capture from timber (primarily from social forestry) is prohibited on PA lands.

This internal pre-eminent focus on revenue generation at the FD needs to stop. It should be replaced by a vision of the FD as provider of a range of critical environmental functions, goods and services to the country. The Government in general and the FD in particular need to articulate and communicate a policy that all forests (both territorial and PA forests) are to be managed to maximize the full range of services they provide. A complementary communications campaign would help in engaging the public more broadly in understanding such a new policy for forests and PAs. A well-structured and articulated campaign could help to fix in the common understanding a simple idea: that forests in general and PAs in particular do less for the country when the FD focuses on fee collection and felling than when forests can provide water, firewood, biodiversity, carbon, and other functional benefits.

17. Create a "Protected Areas and Biodiversity Management" Wing at Forest Department

Given the expanding interest of the general public in PA management (for tourism and biodiversity conservation) and the local public (for direct benefits sharing), the visibility and primacy given to PA management issues will continue to grow. Yet management of the forest PA system continues to be overseen by a mix of Wildlife Circle staff and other staff from the territorial Wings of the FD. PAs and their immediate landscape areas may in one area be managed by Wildlife Circle staff, and in other areas by territorial Wing staff from outside the Wildlife Circle. Even for a single PA, the core zone may be managed by the Wildlife Circle while the buffer area Reserve Forests can be managed by territorial staff. Given the growing importance of PA management, and the confusion caused by managing PAs within territorial Wings with different forest management objectives, it is now time to implement a recommendation made in 2004 (Mitchell, Alam, and Bari, 2004) to create a new Wing within the FD for protected areas and biodiversity management.

Apart from these management issues, there is a more practical and bureaucratic reason for moving from Wildlife Circle to a Wing. Now, the only way forward for an officer working within PAs overseen by the Wildlife Circle is to leave the Circle. Career advancement to the level of Deputy Chief Conservator of Forests (DCCF) can only take place by getting out of the Circle and into a Wing, which means an officer needs to enter the territorial Wings or the Social Forestry Wing. The PA system should allow its own structure for professional promotion and advancement, allowing young officers working on PA management issues to envision specializing and working their entire career in PA management. Creation of a Wing for PA management is an important step in creating a lasting and committed professional cadre of PA experts within the FD.

Along with creation of this Wing, the FD needs now to reorganize the units by which it manages PAs. Initially, the FD staff assigned to PA managed only the lands within the boundaries of the gazetted PA itself. They typically had little or no jurisdiction over FD Reserve Forest lands bordering the PA. Gradually, the FD has recognized that PA buffer areas, including Reserve Forest lands, need to be managed by the same FD PA staff as part of a larger PA landscape. Maps and management plans for PA now include these buffer areas. But this gradual process should now be formalized through a new PA and Biodiversity Wing responsible for all the forest PAs, including not just core areas but also surrounding lands over which FD has jurisdiction. Full control of both core and buffer FD lands would then be in the hands of the designated Wing staff members, with hierarchies rising up to a Deputy Chief Conservator of Forests, PA, and Biodiversity Wing. This formal change would allow, most importantly, rational budgetary management and staff management within the FD structure. The work of staff within this new Wing would extend across the entire PA landscape, with FD responsible for coordinating with other government agencies and private actors across defined landscape areas.

18. Develop Capacity Development and Training Program for PA Managers Across All Levels of the FD

While the mindset of FD staff is slowly changing as a result of PA management experiences, a more concerted and structured capacity development and training plan is still required. Staff at all levels required continuous training opportunities. At the level of new officers, regional training at the Wildlife Institute of India, or exposure to participatory PA management practices in India, Nepal or Thailand are cost-effective opportunities. Refresher and orientation courses can then be organized at national training institutions such as the Forest Academy and the Rural Development Academy. In-service training to FD staff at two-year intervals should be made mandatory and staff performance should be evaluated annually based on the participatory and social achievements.

19. Establish and Maintain Common Standards Across All PA through Centralized FD Skills and Leadership

Although overall FD budgetary and resource allocations are determined from the central level (by Chief and Deputy Chief Conservators), resource allocations within territorial Divisions are made by the Divisional Forest Officers, who have nearly complete authority for deciding how

to implement programs within their Divisions. A long departmental history explains in part this decentralization of decision-making. In the past, DFOs were posted in remote locations where it would have been difficult for central FD staff to control decision-making without long delays and complications. But



Maintaining common standards across all PA requires a stronger degree of centralized FD skills and leadership. Centrally-created designs – such as this ACF office and bungalow design by Module Architects – should present a common image and standard across all PA. [Module Architects rendering]

as the roles and requirements of Divisional FD staff evolve to include formal collaborative management, nature tourism management, ecological restoration, and other new and diverse areas, the decentralized operational model of the FD needs to evolve with it. The need is particularly evident in the management of what should be a unified, seamless, and consistently managed national network of PAs. The PA system – if it is to be a “system” as such – must maintain common standards that allow it to be identified, maintained and – ultimately – admired as a system. And yet, across Nishorgo pilot sites, it has remained the case that resource allocation and technical decisions by DFOs and supporting staff have not been consistent across PAs. Leading examples of this lack of consistency include:

- *Architecture and Construction:* DFOs authorize design of construction interventions that vary widely in quality, conception, and execution. Because best practices are not systematically shared across PA, money is spent on buildings that do not last, or are not appropriate given the needs of nature tourists. Visitors to the PA system may see impressive architectural design in one PA and then find ill-conceived designs in the next.
- *Ecological and Forest Restoration:* Most foresters have been trained in harvesting, preparation, and planting of new plantation, but there is far less consistency of approach in ecological or forest restoration interventions. Interventions in ecological restoration and ecosystem management have been inconsistent across sites. “Restoration” work in multiple PA has included complete clearing and burning prior to planting of new trees, while in other PA, restoration has been conducted per guidelines prepared by the Nishorgo project.
- *Allocation of Benefits to CMO and Other PA Stakeholders:* Differences in the targets for allocation of key benefits to the CMO and PA stakeholders are wide. Some DFO allocate social forestry opportunities to groups that bear little relation to the PA, with plots located far outside the PA boundaries, while other DFO ensure that social forestry gets into the hands of those directly involved in community patrolling, as a benefit that can help offset forest costs.

- *Signage:* Road signs, informational signs, and trail signs together help to create a common idea of standards and “look” maintained across the whole PA system. But DFO and Range Officers decide to post information and signs as they deem appropriate, with different fonts, materials for construction, language, tone, and look. The result is a mix of styles and approaches at different PA.

In all four of these areas, the Nishorgo team prepared and disseminated common technical standards for use across all Divisions, precisely to introduce common approaches. Many FD staff members followed the proposed guidelines and standards, but the adherence to central and common standards was far from universal. A number of steps could be taken to establish and maintain new and common standards across all the PA within the country’s PA system. For activities financed from the development budget (and formalized with a Development Project Pro Forma [DPP] document), requirements for common standards and approaches across PA sites should be formally included in the DPP themselves. The Nishorgo-developed guidelines for ecological restoration, architectural construction and signage should all be included as annexures to that document. For projects financed from the revenue budget, there is no way for the central FD to directly control Divisional level decision-making, but the FD can move in the right direction by issuing Directives to the DFO. If the Directives explicitly require adherence to specific standards, the DFO are likely to follow them.

Finally, the FD should establish two technical Advisory Panels for the FD, one for ecological restoration and the other for construction and architectural interventions. The Panels should include experts from inside and outside the FD. Their scope should include prior review of proposals by FD staff for any interventions within the national PA network, and a mandate to recommend consistent standards across all PA. Such Panels could exert a strongly positive influence by both capturing expert opinion and publishing and making available information to the public about the designs being executed across the system.

20. Explore New Modalities for Obtaining Feedback from the Public for PA Decisions and Plans

Platforms for public feedback should be a priority for all major proposed actions concerning the PA system. The FD has invited extensive outside public input during revisions of the Forest and Wildlife Acts, and in the revisions of the Social Forestry Rules. But more can and should be done, and not just when new legal instruments are being prepared. When the FD is proposing a new management plan for a given PA, the plan could for example be posted on the internet and in local public buildings for public review and comment. And plans that are currently being implemented should also be made available to the public. At the Divisional level, DFO in particular should share plans with local stakeholders via meetings, web postings, and dissemination to journalists. There is an admitted risk in taking these actions, but what is needed is to establish a set of basic items that should be commonly made available to the public, this should certainly include:

- Proposed and (later) approved management plans
- Approved CMO revenues and budgets
- A list of major upcoming events or activities at the PA
- Studies and information collected for the PA

Releasing just these four categories of information would help in gaining feedback from the public and building stronger support for FD activities.

21. Meet 2004 Forest Policy Targets for new PAs totaling 152,000 hectares, and do so through Declaration of PA within Larger Multiple Use Reserve Forests

The strong and rapidly growing desire of Bangladeshi citizens to conserve forests becomes more evident with each arrival of a microbus or tourist bus visitor to the PAs, and with each new opening of eco-cottages and other businesses associated with the PA system. No sooner has the Forest Department and CMO begun to protect a PA, create informational materials about it, and provide PA infrastructure (trails, walkways, bridges) that the number of visitors skyrockets. There are many examples now of the extent to which this has happened at Nishorgo pilot sites (e.g., Lawachara NP, Teknaf GR, and Satchari NP). This rapid growth of visitors is equally evident at the more recreational forest sites, such as the Eco-Park within Sitakunda Reserve Forest, at Banshkali Eco-Park, and at Madhupkunda Waterfall Eco-Park. Bangladeshi citizens are voting with their feet and their money to demonstrate their interest in natural areas of beauty and biodiversity conservation. But the current amount of PA land is not enough to sustain this rapid growth without detrimental effects on the biodiversity the PA is intended to protect for the future. In the high season, controls have had to be put in place on visitors to all these PA.



Newly-created PA in recent years have generally aimed to conserve small patches of natural or particularly attractive forest, leaving larger tracts of more degraded forest in Reserve Forest status. The government should take a longer view, creating larger multiple use PA and putting ambitious habitat restoration plans in place, while allowing dedicated areas for community benefit. [Philip J. DeCosse]

The Forest Department has responded to citizen interest by adding a number of small Eco-Parks to the PA system, with six of them totaling 8,517 hectares, of which Kuakata Eco-Park alone accounts for two-thirds of the total. Other new PA in recent years have also been small in area, including Medha Kacchapia (395 ha), Khadimnagar (697 ha), and Satchari (242 ha). Essentially, the Department is identifying areas of particular biodiversity or tourism interest, usually within much larger Reserve Forest tracts, and carving them out to be Protected Areas. The remaining adjacent tracts of Reserve Forest land generally remain under management of territorial divisions, with little association to the PA.

This trend of new PA creation is a positive one, but it needs to be modified so that new PA are larger. The small PA being carved out of Reserve Forests now are too small on their own to serve as habitat for conservation of viable populations of many mammals. Also, when the Government creates small PA within much larger Reserve Forests, the larger Reserve Forest

areas are essentially written off for conservation, usually under the argument that they are not at present interesting for biodiversity conservation or tourism purposes. But evidence from Nishorgo has indicated (especially at Chunati) how rapidly habitat restoration can occur in degraded forest, and the effect that restoration can have on restoring species and ecosystem characteristics that had been damaged. Finally, the tiny PA approach to expanding the PA system should be changed because, without a more aggressive approach, it will not be possible to meet the targets set by the Government in the Forest Policy of 1994. The Policy states that:

“The priority protection areas are the habitats, which encompass representative samples of flora and fauna in the core area of National Parks, Wildlife Sanctuaries and Game Reserves. Attempts will be made to increase the amount of this protected area by 10% of the reserved forest land by the year 2015.” (Forest Department: 2004)

The Reserve Forest Land under management of the Department stands now at approximately 1,520,000 hectares across the country. The 10% target called for in the policy would imply an increase of 152,000 hectares to the national PA system, which now stands at a total of 252,411 hectares, of which the three PA within the Sundarbans account for 55%.

The Satchari and Teliapara Reserve Forests offer a concrete example of how the FD might proceed. What is now the Satchari National Park is a tiny 243 hectare patch of natural forest with the 1,760 hectare Satchari Reserve Forest and the adjacent Teliapara Reserve Forest of nearly the same size. The Reserve Forests includes remnants of plantations of teak and other commercial species, most of which are now felled, degraded and in a state of natural regeneration. The Range also includes on its southern end near the Satchari National Park, a large plantation of non-productive (possibly sterile) oil palm that not only produces no fruit, and has no ecological value, but also provides an ideal habitat for mosquitoes carrying the deadly cerebral malaria that threatens that area persistently.

Rather than taking out the small piece of remnant natural forest and making it a Park, the entire two Reserve Forests should be considered for a single multiple use zone, including a core zone with vastly extended National Park or Wildlife Sanctuary, and then buffer areas destined for community use in the remaining Reserve Forests. These Reserve Forest, and others like it, could become models of mixed use ecological areas serving the needs of the country (for conservation and nature tourism – wildlife watching, hiking, recreation) the local community (through buffer plantations targeted to CMO stakeholders involved in PA management), the neighboring tea estates (through improved soil conservation and watershed management), and even timber concessionaires under managed concession contracts. At only 2.5 hours from Dhaka, this large area could much more effectively meet the evolving needs of the country through a mixed management framework than in its current role as Reserve Forests with limited management..

A number of other priority candidate areas should in a similar way also be put under multiple use forest management, with large PA core zones. A short list of leading candidates would include the Sitakunda Reserve Forest, the rest of West Bhanugach Reserve Forest, the entire Rema-Kalenga Reserve Forests, the entire Inani Reserve Forests, the Rajkandi Reserve Forest, the FD land in the hills west of Hail Haor, Sangu and similar areas in the Hill Tracts. Only by considering such larger areas for multiple use forests, including PA, will the FD meet

the Forest Policy goals, meet expanded viable biodiversity habitat needs, and provide the land and opportunities demanded by a population increasingly interested in nature tourism.

Supporting Issues and Approaches

22. Facilitate, Finance, and Encourage a Private Foundation Dedicated Primarily to the Protected Area System

It is now common in many parts of the world for public PA systems to be complemented by private PA-dedicated NGOs or foundations that exist explicitly to support those systems.¹ Barrett et al (2001) recognized that the complex skill set required to maintain PA conservation called for national-level support. Skills in areas such as fund-raising, conservation science, and tourism planning, to name three, would require support and involvement of expertise not likely to be found at the level of PA. Private PA-dedicated foundations typically undertake one or more of the activities noted above that public PA managers cannot, especially those associated with fund-raising and communications. As importantly, private PA foundations can serve as an independent voice for monitoring and overseeing the system.

The lack of any such single private organization to support the Bangladesh PA system remains an important gap in the institutional landscape. While deliberately creating such an organization using multi-lateral or bi-lateral funds is unlikely to be sustained – the impetus should come from private individuals, not public sector organizations – support should be provided to any incipient organizations that may form with these objectives. A newly articulated policy – such as an amended Forest Policy – would strengthen the ability of private organizations to play this supporting role.

One of the more important contributions of Nishorgo's work – indeed it was a central feature of the co-management approach in the project design² – was the increased engagement of civil society members in the PA system at both national and local levels. The roles of local level organizations have been reviewed in other sections of this chapter. At the national level, the increased involvement of civil society partners represented a shift in a long-standing trend towards greater public sector control over the PA system. In the mid-1980s, a conservation forum had entertained the proposal (by the then-Director General of Tourism) that a Wildlife Task Force be composed of a large number of non-Government members, and also that the government consider ceding the management of individual Protected Areas to private organizations (Karim, 1985). Yet by the time Nishorgo started in 2003, it would have been unthinkable to cede forest PA to private conservationists. The assertion of PA control by the Forest Department was too strong for that. The Nishorgo effort extended the involvement of national level civil society. Work involved engagement in particular of private companies interested in

¹ Numerous such organizations now exist. One of the better known is the US National Park Foundation, funded by private donations to “strengthen the connection between the American people and their National Parks by raising private funds, making strategic grants, creating innovative partnerships and increasing public awareness.” Such public-private partnerships exist also for individual PA throughout the world, typically assisting in raising private funds and conducting educational activities.

² The expected project “Outcomes” included this: “A variety of institutions within civil society will become more vocal in their support for Protected Area conservation.”

associating with nature, environmental clubs, university researchers, the Bangladesh Scouts, journalists, nature tourism companies, and others.

Involvement of one or more private PA-supporting foundations (or NGOs) would be particularly useful to do the following:

- Attract private corporate and individual donations in support of the PA system
- Liaise with leaders of the nature tourism sector on issues related to tourism in the PA system
- Gather opinions and feedback about the PA management work of the FD and the CMO
- Help to raise the profile of the Bangladesh PA system and its work around the world
- Assist youth to get involved with PA conservation through educational activities, nature visits, wildlife monitoring, and outreach to local communities
- Assist nascent CMO across the country in institutional capacity development
- Engage the Bangladesh diaspora community with nature conservation in Bangladesh
- Provide training opportunities or other small incentives to encourage excellence among PA managers within the Forest Department
- Facilitate research into the PA system by national and international research organizations and universities

Some of these roles are already being supported by private organizations. IUCN-Bangladesh provides training opportunities for PA managers; the Wildlife Trust of Bangladesh provides research facilitation and advice; the Bangladesh Environmental Lawyers Association (BELA) provides legal and policy advice; and the Arannayk Foundation has begun providing financial support to CMO. But the lack of any institution committed to the broader set of roles indicated above remains an important gap in Bangladesh, where the public sector has become used to managing PA with little input or support from civil society.

23. Co-Management Organizations Should Target the “Marginalized” Rather than the “Poor”

Nishorgo began in 2003 at a time when poverty-conservation tradeoffs were of particular interest in global conservation discussions. The 2003 World Parks Congress in Durban highlighted issues of poverty (see IUCN, 2003), with those informed by a range of published works (e.g., Fisher (2003) and Brechin et al (2003)). This focus was reflected in the later Millennium Ecosystem Assessment (2005), which found that environmental loss worsens the livelihood status of the poor, and that the poor need to benefit from conservation.

Within Bangladesh, the common refrain about Nishorgo’s purpose was to ensure that the poor benefitted sufficiently from the project so that they would no longer destroy the forests. The emphasis amongst the government and implementing partners was on providing sufficient new monetary opportunities to the poor so that they would become pro-conservation.

As Nishorgo progressed, it became increasingly clear that giving a voice to the poor was

as important as providing economic opportunities, but much more difficult to effect. The Nishorgo team operated initially under the assumption that the poor could be involved through the same PA participatory processes that involved better educated stakeholder groups, principally through participation in Committee and Council meetings. But engaging the poor as partners in conservation did not result from these simple participatory efforts. Kaimowitz and Shell (2007: 568) recognized that the focus of conservation would need to go beyond “earlier community or participatory conservation agendas” including increasing income, and should now “involve focusing on the weak and the vulnerable.” They understood, as the Nishorgo team eventually did as well, that there is an important difference between focusing on the poor as income-deficient (a problem solved by directing money to the poor) and focusing on the poor as “weak and vulnerable.” Efforts to strengthen the role of the poor in decision-making remained a recurrent priority throughout Nishorgo’s work, and provided the impetus for including a new poor-focused group within the CMO structure (the People’s Forum) when the CMO Government Order was revised in 2008 and 2009.



The word “poor” is commonly used to denote targeted participants in PA co-management. Those who have lived for decades or longer around the PA – such as this woman from the Dolubari Tripura community near Lawachara National Park – are rich in culture, language and ethnic diversity. They have, however, been consistently marginalized from the decision-making about PA resources, and it is this marginalization that needs to be the primary target of PA co-management work.

[Philip J. DeCosse]

Semantics in this learning process were important. The word “marginalized” gradually replaced the word “poor” as a description of the target for social interventions involving equity. The team recognized that the “poor” are poor in material goods because they are marginalized, and they are marginalized because they have been deliberately marginalized by parts of society that would prefer they remain so. It gradually became clear that use of the word “poor” to capture the target group for PA co-management was misleading, and even served to divert resources from the more pertinent goal of governance and empowerment.

The solution to the problem of the “poor” is one of poverty reduction: an economic solution that threatens few people, so long as the resources are available. But if the target group is the “marginalized,” then the solution is inclusivity, engagement and power-sharing, and this is both a more complex and a more threatening route, at least to those that have held power over the PA.

Use of the broader term “marginalized” rather than “poor” also creates a greater unity of purpose for efforts to engage minority ethnic groups and women in PA management and benefits sharing. For a time, the logic of engaging women was based on the vague notion that there should be a “gender approach.” The solution to the “gender” problem was to get more economic opportunities to women. But it became increasingly clear that the central challenge for women was not poverty, but rather their exclusion from decision-making about resource allocation.

It is the marginalization of ethnic and religious minorities from PA decision-making that presented the most complex and intractable challenge to sustaining PA co-management. The ethnic minorities are viewed by many members of Government in particular as politically powerful, able to tap into the networks of Adivasi organizations to counter the directives given by the Government. And yet, the day-to-day status of ethnic minorities within the PA can only be described as marginalized, even when their families have lived within the forests for generations. They are generally not asked to sit at head tables, nor speak first, nor given first access to lucrative social forestry opportunities. There is a long and complex explanation for this, but the fact remains that ethnic minorities living in and around the PA are marginalized in political, economic, and social ways across all the PAs. Efforts by Nishorgo to engage them more formally generally made some limited progress on a PA-by-PA basis, but did not bring about fundamental change.

Solutions to the problem of ethnic marginalization have focused on redressing the problems through changes in legal instruments. But the more immediate and system-wide change will come when the Forest Department staff themselves adopt a new orientation towards the ethnic minorities. When DFO and Range Officers working at the PA engage with ethnic minorities in a manner that enhances the latter's status, recognize their legitimate concerns, and offer them a role in making management decisions concerning the PA, the clashes with minorities will recede from their current status of latent conflict.

24. The Forest Department and Researchers Need to Develop Knowledge Management Priorities and Strategies for the PA System

The Nishorgo project team worked to improve knowledge-sharing through practical steps, such as compilation, scanning, and publication of applied research reference CDs, including hundreds of previously difficult-to-obtain scanned documents and maps on the PA system. One of the compilations focused in particular on the Sundarbans. But these efforts to compile PA relevant documents represented only a small effort to improve knowledge-sharing. Much more can and should be done.

The FD remains a rich source of information, both because its staff are knowledgeable and because it houses critical current and past management documents on the PAs. An annual "State of the Protected Areas" report would go a long way towards communicating available information about the status of the PAs. With the use of CDs to share information now almost obsolete, focus should be placed on an upgraded FD website that can store and share the FD's extensive PA documents and archives. A web platform would also assist in capturing and sharing knowledge from the public that is not contained in published or grey literature.

The institutional orientation of the FD in the area of knowledge-sharing is of pre-eminent importance. Foremost among the practical steps that could be taken is the appointment at the FD of a senior officer with an explicit mandate and authority to share critical FD documents – especially maps and forest PA management plans – with the general public. Such a person, ideally at the level of Deputy Chief Conservator of Forests, might be designated the "Knowledge Management and Research Liaison Officer" within the Department.

The FD need not presume that it alone should manage and make available information on the PA system. A number of NGO have established themselves as leaders in the support of applied research and knowledge-sharing relating to the PA system.

One of the leading opportunities for expanding thinking and learning about the PA system rests in the Bangladeshi diaspora of students and researchers around the world. Websites and communication materials associated with the PA system should make explicit how the FD and Bangladeshi partners can simplify the research process for diaspora students and professors. Data and information should be made available over the web so that researchers can prepare plans prior to arrival in country. Baseline information and datasets on social or biological parameters should be made available openly via the web. Assistance can be given for obtaining permission to reside on or near PA lands while carrying out research.

During Nishorgo, the FD facilitated research and training with the East-West Center (EWC) of Honolulu, Hawaii on the PA system, and this pilot stands as an excellent example of the value of such international research collaboration and sharing. Under this pilot, EWC researchers (both Bangladeshi and foreign) worked with student researchers in Bangladesh to prepare two thematic volumes of research papers on alternative income generation from the PA and on co-management within the PA. Much more can be done along these lines.

To maximize the value of research efforts, the FD should work with partners to develop and publish a set of research priorities, including at least these topics:

- The role of (and benefits to) the ultra poor in co-management as it has developed
- Methods and tools for assessing the social and managerial strength of CMO (as proposed by Khan et al in this volume)
- The political economy of revenue capture processes, and particularly the PA entry fee
- The current benefits accruing to women from co-management by comparison with men
- The efficacy of ecological restoration efforts undertaken (and optimal strategies for future restoration)
- The effectiveness of indicators of forest and ecological health
- The role of forests in the maintenance of the country's wetlands and ensuring food security
- The measures required for controlling the diversion of forest lands for non-forestry purposes

25. Extend Efforts to Develop a Unified and Widely Recognized “Brand” for a National Network of Protected Areas

The project made a special effort to develop a distinct and recognizable program within the FD revolving around co-management of PAs. Communications events and tools were used with the central objective of improving recognition and understanding of “Nishorgo.” In addition, the project team worked to develop common architectural standards across pilot sites, as well as common standards for trail development, monitoring, staff interactions with the CMO, and eco-cottage development. By the time the project ended, awareness of Nishorgo amongst



Without an active and sustained national communications campaign, a national network of co-managed PA will not become an easily and commonly recognized element within Bangladesh's environment. [Nishorgo Support Project]

the environmental community was high, and the image was generally favorable. But the project had neither the resources nor the goal of achieving mass awareness of a national Nishorgo PA co-management program. That would need to be the target for a follow-on and expanded effort.

Building mass awareness of – and interest in – a unified co-managed PA system should continue to be among the highest priorities in support of PA co-management. Steinberg (2005) recognized the importance of broad-based campaigns in support of national networks. As work continues on building the PA system through improvements at community and PA level, efforts need to continue to set a clear image and brand of a national co-management forest network in the mind of the broader public. One can envision a day in the near future in which any encroachment on lands within the national Nishorgo network would create a political and popular backlash at both national level (because people care about PAs in their own right and/or because they visit them) and local level (because neighboring populations stand to gain when forests are kept intact and preserved).

A Closing Note

This book represents a response to a recognized need for better documentation of what actually happens when participatory conservation approaches are introduced. Nishorgo introduced many changes to PA management in Bangladesh, and these have been catalogued throughout the chapters of this book. The central aim has been to learn from the process, and to that end each chapter of the book drew specific lessons for consideration by PA practitioners in Bangladesh and abroad. It was hoped from the beginning that conservationists and PA managers would learn from and build upon the experiences of Nishorgo in Bangladesh and create better solutions.

But in addition to these knowledge management objectives, the book was also compiled because Bangladesh is an important place to monitor and learn from conservation initiatives. Given the twin challenges of population density and poverty, the progress of co-management in Bangladesh should be of particular interest to the global conservation community. To these two challenges, others were identified and added, not least rapid economic growth, weak governance, and the technical sophistication of PA management. Bangladesh has had to confront all of these challenges, and Nishorgo remains a work in progress. The Nishorgo effort clearly and demonstratively altered the PA management landscape by introducing a formal co-management approach at sites with high population density, rapid forest loss, economic pressures for forest goods, and high levels of poverty. This single area of progress marked

an important step forward, not just for what it meant in Bangladesh, but for what it means in the global conservation community. Formal structures for power-sharing were introduced into the messiest of political, social, and environmental conditions. And this alone was significant. Whether the FD and others stay on this path – and stay fully committed to it – remains to be seen. But the door is open and can no longer be closed. The FD had reached a point where it had few other options but to engage local stakeholders more formally, and Nishorgo provided a structure for that engagement. The co-management approach tried under Nishorgo has helped the image of the FD with outsiders, at a time when it was sorely needed.

The Barrett et al review of participatory conservation around the world concluded that there is general agreement that “successful conservation initiatives” must possess four characteristics (Barrett et al, 2001: 500):

1. “The authority, ability, and willingness to restrict access and use
2. The wherewithal to offer incentives to use resources sustainably (which in some cases may mean no use at all)
3. The technical capacity to monitor ecological and social conditions
4. The managerial flexibility to alter the array of incentives and the rules of access so as to cope with changes in the condition of the resources or its users”

They went on to note that “conservation programs administered by the central governments of many tropical countries commonly have difficulty meeting all of these conditions. Community-based conservation schemes, on the other hand, too often emphasize only incentives while ignoring the other three conditions.”

The Nishorgo project aimed to put in place an institutional framework that could address all four conditions. The FD already had the authority for the first condition and the newly created CMO and CPG enabled more effective application of restrictions. Entry fee sharing, social forestry, and other income sources addressed the second. Tools, approaches, and capacity were put in place for ecological and social monitoring, although their operational use by the CMO including FD need further development. But the most important gap – and the greatest remaining challenge – in the framework for successful continuation of Nishorgo’s co-management efforts remains achieving managerial flexibility and a favorable legal framework required for ensuring institutional sustainability of co-management.

The work of Nishorgo continues, led by communities trying new ideas, by an evolving Forest Department, and by a society that itself has to find a balance between the needs of economic growth and the strong and deep cultural desire to conserve the idyllic natural beauty – the “Nishorgo” – of Bangladesh.

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