

## The Conservation Context in 2003

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The purpose of this chapter is to outline the policy, legal, institutional and socio-economic characteristics of the conservation context when Nishorgo began in early 2003. The chapter begins with a brief descriptive summary of the historical context and then turns to the status of forest and biodiversity at the time the project began. Subsequent sections cover the policy and legal, institutional and socio-economic context at the time.

### Historical Context

Forest and biodiversity conservation in Bangladesh are rooted in cultural traditions and in pre- and early post-colonial strategies of the Forest Department, which has a long and storied history of forest management. The Charter of Indian Forests was promulgated in 1855 recognizing the importance of reserve forests and proposing an outline for forest conservation for all of India (Negi 1994). Concerns for biodiversity assets in the country date back to colonial times, and were evident in the 1879 Elephant Preservation Act and the 1912 Wild Bird and Animals Protection Act. These regulations were repealed in 1973 when the Government of Bangladesh passed the Wildlife (Preservation) Act, which today is the principle legal framework document for activities concerning forest Protected Areas.

Before partition of the Indian sub-continent in 1947, the forests of what is now Bangladesh were administered under Forest Circles of the Bengal and Assam Forest Departments. From 1947



*Forest Department staff bungalows like this one at Teknaf Wildlife Sanctuary were constructed in the 1920s.*  
[Philip J. DeCosse]

to 1962, the Provincial Forest Department of Pakistan was the authority, and with the formation of Bangladesh in 1971, reserved and proposed reserve forests passed to the Bangladesh Forest Department. Throughout these transitions, the Department's staff maintained high standards of professional forest management, evident today in the few remaining forest management plans and reports from the time which survive at the Forest Department in Bangladesh. Through the colonial period and into the Liberation period, the Forest Department staff, and particularly the Divisional Forest Officers (DFO) maintained unequalled power in the more remote rural areas where forests were still plentiful.

Forest management by the Department has had a mixed impact on conservation of biodiversity in forests. During the colonial era, timber planting and extraction drove forestry operations, with the 1894 Forest Policy shifting focus to revenue earning and framing of formal government rules to that end. Based on the earlier Forest Policy, the 1927 Forest Act was passed, consolidating central government control over declared Reserve Forests and driving an expansion in plantation management activities. The 1955 Forest Policy reiterated the authority of the Department over forest lands, and re-asserted a silvicultural emphasis on maximizing total yield from the forests.

Some scattered efforts were made in the 1960s to recognize a role for conservation, most notably with the declaration of Parks or Sanctuaries at Sundarbans East (1960), Madhupur (1962), and Pablakhali (1962), but the driving priority at this time was "development forestry", with its emphasis on high yielding silvicultural practices and on the forest's direct economic contribution to government revenue and the economy. Management Plans or Working Plans during this time targeted production, with rare mention of conservation, unlike the plans of earlier decades.

Recognizing the perilous situation of natural forests in the country, the Forest Department began some limited efforts in the 1960s to create forest Protected Areas from Reserve Forest lands. The largest increase in these declared Protected Areas (PAs) took place in the 1980s. By 2002, the PAs included seven National Parks, eight Wildlife Sanctuaries and one Game Reserve. Although these areas were brought under conservation status, few received matching investments in staff capacity, infrastructure, applied research, or conservation management. In



*Rice cultivation inside Rema Kalenga Wildlife Sanctuary, 2003. Human interaction inside the PAs is a common feature throughout the system. [Philip J. DeCosse]*

effect, the PA network – although established to encourage protection – brought in many places a reverse impact. Without a budget for conservation practices and any training for conservation interventions, forest staff in the PA sites perceived the postings as places with fewer resources for forest management operations or less "real" work to do (as many described it during initial Nishorgo team assessments in 2003). With minimal operational budgets for conservation and protection work and an increasing demand for timber, the PA lands saw the worst of forest pressure and felling by 2003.

## Forest and Biodiversity Status in 2003

In 2003, 17 percent of the total land mass of the country was designated as forest land. This figure included state forest land of some 2.2 million hectares, itself consisting of 1.3 million hectares of natural forest and plantations under the jurisdiction of the Forest Department (FD), and 0.9 million hectares of un-classed state forest administered by the Ministry of Lands. An estimated 0.4 million hectares of forest were in private hands, notably including the successful homestead plantations common across the floodplain areas of the country and small tracts of natural forest and plantations on estate lands (Roy 2004).

Reliable up-to-date statistics on the changes in tropical forest cover in Bangladesh were hard to come by, but a 2001 report on forestry in Bangladesh concluded that “forest cover has been reduced more than 50 percent since the 1970s” (Chemonics 2001).

For the largest and most important PAs within the network, the situation was indeed dire. The three Wildlife Sanctuaries in the Sundarbans had been subject to steady extraction of mature sundri (*Heritiera fomes*) and other valuable timber. The Chunati Wildlife Sanctuary had been virtually clear cut after its declaration as a PA in 1988. All the northern PAs with remaining teak stands were coming under increased pressure as the teak volume remaining on Reserve Forest lands dwindled.

## Policy and Legal Context

The central and primary laws and policy documents framing interventions in forest Protected Areas include the Wildlife (Preservation) Act 1974, the Forest Act of 1927 and the Social Forestry Rules, the last of which was not yet finally approved at the time of Nishorgo’s launch, but was already being put into practice throughout the country in a provisional form.

The Wildlife (Preservation) Act identifies three categories of PAs – National Parks, Wildlife Sanctuaries and Game Reserves – and stipulates rules and restrictions for their management and use. National Parks are identified as areas of “outstanding scenic and natural beauty with the primary objective of protection and preservation of scenery.” Hunting, capture, or disturbance of wild animals, firing of guns, burning, cutting or damaging plants or trees, clearing land for any purpose, or polluting water are prohibited. Similar provisions apply also to the Wildlife Sanctuaries and Game Reserves, and the Act allows little scope for formally allowing a collaborative governing structure, or any formal inclusion of neighboring communities in the decision-making process for Protected Areas.



*Just behind the Shilkali Garjan forest on west side of Teknaf in April of 2004, this Beat Officer observes the hillsides that have been prepared for a plot of social forestry. [Philip J. DeCosse]*

Most declared Protected Areas have been carved out of existing Reserve Forest land, and continue to have borders with existing Reserve Forests, so the Forest Act 1927, which governs many aspects of Reserve Forest use are directly relevant to biodiversity conservation. Yet, at the time Nishorgo began, the Department was not implementing policies that might have linked Reserve Forest management in the buffer areas of PAs to the PAs themselves. Hence, in one notable case in 2003, FD staff scheduled clear-cut felling of teak in a Reserve Forest adjacent to a natural forest area within the Satchuri National Park, and had to clear a wide road through the Park to allow loggers to get timber out. Since there was not at the time any management or policy framework discouraging or disallowing timber felling immediately adjacent to a PA, this was considered a normal and acceptable practice.

The Forest Act 1927 offers considerable latitude to the Forest Department to determine use of forest lands gazetted as Reserves, and centralizes much of that authority in the person of the Chief Conservator of Forests, while allowing little scope for any formal role for neighboring communities or the broader public. It is this Forest Act 1927 that has drawn the particular ire of community groups and NGOs, particularly those working on behalf of minority communities that lost access to forest lands after promulgation of this Act.

Social forestry rules had been in draft form since 2002 and were being applied under various projects including the World Bank's Forestry Support Project (FSP). The draft rules as well as formalized project guidelines for social forestry set the terms by which local communities would benefit from shared revenue from planted trees on Forest Department land. The design of the FSP, launched in 1997, called for establishment of social forestry plantations on Reserve Forest lands in buffer areas around PAs. The pros and cons of these social forestry plantations had already been widely debated in Bangladesh by the time Nishorgo began, see in particular Khan et al (2004) and Gain (2001).

However flawed, the social forestry process provided a direct avenue for benefit sharing with communities from government forest land. Indeed, in a government financial system where it is widely understood that all revenue must be collected and reported to the central Treasury prior to any field or local disbursements, the FSP had found a way to allow revenue to be retained locally by beneficiaries at the time of harvest and auction. This was a significant and positive improvement to standard government practice in all sectors, and certainly in the forest sector, where all revenue is collected centrally.

The most common formula for benefits sharing in social forestry was the so-called 45-45-10 model, under which 45 percent of harvested revenue would go to the government, 45 percent would go directly to the beneficiary, and 10 percent would be deposited into a revolving Tree Farming Fund (TFF) to allow replanting of the same land. The Social Forestry Rules were gazetted officially in 2004.

The National Forest Policy 1994 included this key target to expand the Protected Area network: "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 per cent of the reserved forestland by the year 2015" (GoB 1994). The Policy stated broadly that:

“Through the participation of the local people, illegal occupation of the forestlands, illegal tree felling and hunting of the wild animals will be prevented.”

The legal framework for what were called “Ecologically Critical Areas” (ECAs) provided another important reference point for Nishorgo as it began. The ECAs had been authorized under the Bangladesh Environmental Conservation Act of 1995, which stated that if the Government is concerned that the degradation of an ecosystem has reached “a critical state” or is so threatened, it could declare the area to be an ECA. In April 1999 this authority was exercised for the first time by the Secretary, Ministry of Environment and Forests with the advice of the Director General of the Department of the Environment (DoE) in officially notifying the establishment of seven separate wetland and other areas covering approximately 40,000 ha. The language of the Act allowed the DoE to identify forest areas for designation as ECAs, but it did not do so. However, a 10 km wide buffer immediately adjacent to the entire Sundarbans Reserve Forest was declared as an ECA, so this use in declaring buffer areas, and in most of the ECAs covering a mix of private and public lands offered a potential mechanism for enabling future participatory management initiatives such as Nishorgo.

The broader framework for biodiversity management at the time Nishorgo began was provided by Bangladesh’s participation in a number of international conventions. Bangladesh was a signatory to the 1992 Biodiversity Convention elaborated at the Earth Summit in Rio de Janeiro and was a participant in earlier global conservation initiatives before “biodiversity” became the watchword of the day. The country had ratified the 1971 Ramsar Convention on wetlands of international importance and waterfowl habitat, the 1972 Convention concerning the protection of World Cultural and Natural Heritage and the 1973 Convention of International Trade in Endangered Species (CITES).

The theme of biodiversity conservation had also been included in the 1995 National Environmental Management Action Plan and the 1997 draft of the National Conservation Strategy so the ideas both of conservation and community involvement was not foreign to the policy dialogue and framework at the time. In 2002, the Ministry of Environment and Forest with the collaboration of the International Union for the Conservation of Nature (IUCN)-Bangladesh and funding support from United Nations Development Programme, had begun the preparation of a “Biodiversity Conservation Strategy and Action Plan” in accordance with the requirements for signatories to the Convention on Biological Diversity.

## **Institutional Context**

At the time Nishorgo began, conservation or management activities within the five target Protected Areas were extremely limited. The Wildlife Circle that had been created in the late 1970s and then suppressed in the 1980s had been brought back as an administrative unit in 2000. But Wildlife Circle staff members were without operational resources and, more importantly, did not have authority over most of the Protected Areas. In 2003 the only protected areas nominally under the management of the Wildlife Circle were the three Sundarbans sanctuaries and Bhawal National Park. None of the five selected Nishorgo pilot sites were under the management of the Wildlife Circle.



*Sign at entrance to Lawachara National Park, 2003. The sign directs visitors to travel some 30 miles to get permission to enter the PA. Guidelines for managing PA visitors were not then widely understood.*

[Philip J. DeCosse]

Whether in the Wildlife Circle or territorial Divisions, FD staff members had little training or understanding of protected area management needs, and in most cases were scarcely familiar with the boundaries of the declared Protected Areas. Other than makeshift hand-painted signs at Satchuri and Lawachara, none of the five sites were demarcated and recognized as protected areas to the public. Indeed, the words “Protected Areas” in English were scarcely used except by those that had taken part in IUCN-supported processes (such as the World Parks Congresses), and had no clear and broadly understood Bangla translation either.

Training of Forest Department officers in wildlife or protected area management was limited. The FD under the Global Tiger Forum and the FSP had sent eight Assistant Conservators of Forest (ACF) to the Wildlife Institute of India in Dehradun to complete a ten-month diploma course in wildlife management. In 2002 USAID financed the participation of eight more ACFs in the same wildlife program. This program was the primary exposure of senior staff members in the department to the principles of protected area management, although a number of other senior staff members had received master’s degree training in zoology or wildlife management. Training and awareness programs in the management of people and protected areas were largely absent.

The 2001 Chemonics assessment put it this way:

“In the other national parks and wildlife sanctuaries, there is no semblance of protected area management. In many cases, Forest Department staff is unaware of the boundaries, or even the existence of the protected area. The protected area is simply a part of the surrounding reserve forestland.

Forest Department officers sell permits to allow collection of firewood, sun grass, and poles. Fires are allowed to encourage the growth of bamboo. Forest Department staff tolerates grazing of livestock in the wildlife sanctuaries in the same way that it is tolerated in the adjacent forest” (Chemonics 2001).

While the conservation interventions at Protected Areas were indeed limited, a specific biodiversity conservation component had been included in some major multilateral bank funded loan projects being implemented by the Department. Included among these were the World Bank-funded Forest Resources Management Project, the Asian Development Bank-funded Forestry Sector Project and – not long before the start of Nishorgo – the Asian Development Bank-funded Sundarbans Biodiversity Conservation Project.

Under the Forestry Sector Project, conservation management plans were prepared for eight PAs. At the same time, strategies for biodiversity conservation in each of the country's Forest Divisions were developed to guide the efforts of the Forest Department in this new mandate for biodiversity conservation. The technical recommendations at site level and divisional level had yet to be taken up by 2003, however, reflecting a continued focus on revenue-based and production forestry within the Department, and within the broader government.



*Seized timber stacked at site of then-proposed Satchuri National Park, 2003. [Philip J. DeCosse]*

A project approved in 2002 by UNDP and GEF-- the Coastal and Wetlands Biodiversity Management Project – was to be the first effort to make the ECA concept operational at four ECAs: Cox's Bazar-Teknaf Beach, Sonadia Island, St. Martin's Island and Hakaluki Haor (UNDP 2001). And under the Ministry of Environment and Forest-implemented and UNDP-supported Sustainable Environmental Management Program, a component was implemented to support participatory wetland ecosystems management and biodiversity conservation in wetlands including haor (large wetland depressions), char (accretion of lands in river or bay) and floodplains, and included some restoration of swamp forests.

USAID, for its part, had invested in developing community-led, ecosystem-based approaches for biodiversity management through the Management of Aquatic Ecosystems through Community Husbandry (MACH) project, begun in 1998. This project was assisting local communities, local government bodies and the Ministry of Fisheries and Livestock to undertake participatory management and conservation of vital open water wetland and fisheries resources. MACH operated in three representative freshwater wetland systems: Hail Haor – a large perennial wetland located on the floodplains of Moulavibazar District in the northeast of the country; the seasonally flooded Lower Turag-Bongshi River Basin in Gazipur District just north of Dhaka; and the flash flood-prone Upper Kongshaw-Malijhee River Basin located in Sherpur District near the northern border; in each case the immediate catchments included some part-degraded forest lands. It worked with a range of stakeholders within the local communities but particularly those who rely on the wetland resource base, notably fisherfolk who had been most directly affected by past declines in productivity of the degrading wetlands resource.

A mid-term evaluation of MACH conducted in late 2001 concluded that the project had made significant progress in catalyzing a community-based response to the issues affecting the sustainability of open water resources. The Nishorgo team recognized at startup that it would need to learn from these successes.

A number of other activities were under way in biodiversity management at the time,

including a program financed by the U.S. Fish and Wildlife Service with IUCN-Bangladesh and NACOM, a local conservation NGO, to improve conservation of the Asian Elephant through a survey of the existing elephant populations in the Chunati and Teknaf areas.

## Socio-Economic Context

The period from 1999 through to 2003 (when Nishorgo began) was marked by steady growth in the GDP of Bangladesh (5.2% per year on average), with Gross National Income (GNI) also growing steadily during the period, from US\$ 780 in 1999 to US\$ 980 in 2003. In spite of political instability, this growth has continued and even increased in the period since, with annual GDP growth above 6% in every year since 2003 and GNI reaching US\$ 1,340 by 2007 (World Bank no date).



*Betel leaves from Lawachara National Park's Maghurchara Khasia Village are packaged for sale. Rising demand for these and other forest products placed increasing pressure on the PAs. [Philip J. DeCosse]*

Bangladesh had made significant progress in reducing poverty levels in the two prior decades, but the number of people living in poverty was still very high. According to the World Bank "Poverty Assessment for Bangladesh," more than 56 million people were living in poverty in 2005, 35 million of whom were living in extreme poverty (Table 1).

**Table 1: Poverty and Extreme Poverty (percent of population)**

	1991-1992	1995-1996	2000	2005
Poverty	56.8	50.1	48.9	40.0
Extreme Poverty	41.3	35.1	34.3	25.1

Source: World Bank (2008)

The heart of the rural poverty challenge is the management of natural resources. Seventy percent of Bangladeshis depend on natural resources (wetlands and forests) for their livelihoods and these resources have been modified or diminished in scale (USAID 2003). The rural poor, although mostly landless and near landless, are traditionally the most natural resource dependent living lives totally dependent on natural capital including wild aquatic and forest common resources from public lands and laboring on farm land.

The rate of reductions in poverty between 1991 and 2005 did not occur equally across the country. While poverty declined overall, these improvements have been less rapid in rural areas in general, and poverty in the western areas of the country had declined more slowly than the eastern areas, including the four eastern Districts where the Nishorgo pilots sites are



located (World Bank 2008). The rapid economic growth that had reduced poverty throughout the country had benefited people in urban areas more than rural, with significant wage employment increases in urban areas – much of it due to the garment, telecommunications and banking sectors – and consequent declines in urban poverty levels. Accompanying this steady economic growth has been an increased concentration of wealth, with those benefitting have steadily more disposable income. The top decile of income earners in urban areas accounted for 28 percent of income in 1984 and 41 of income of total income by 2000 (BBS 2003).

As the incomes of urban populations grew, so did their expenditures on tourism and nature tourism. In the mid-1990s, the Parjatan (government-run) hotels were the only tourist facilities at the Cox Bazar beach area, but by 2003 there were no less than 10 multi-story hotels, with five more under construction. The crowds on holidays in Cox Bazar’s beach had come to be as severe as those in Dhaka. And visitation to nature areas in other parts of the country also saw a growing demand.

This desire and ability to pay for recreational outings by a growing urban middle and upper class was a trend not missed by the Government. The Government began to invest during this time in a newly created concept of “Eco-Park”. Although these Eco-Parks had no legal standing under existing legislation, they were created through necessary Government Orders and then financed with Government-backed investment projects. These Eco-Parks had little to do with ecotourism as defined by the Ecotourism Society<sup>1</sup> or with its application by such leading ecotourism operators as Guide Tours Ltd. They were instead opportunities for mass tourism in a modified natural environment marked by extensive construction interventions such as roads, cafeterias, elevated walkways, zoos and the like.

Typically backed by a strong Member of Parliament or a Minister with forest lands in his constituency, these Eco-Park projects had increased in number rapidly just prior to Nishorgo’s beginning, and included projects at Madhobkunda and Moorachara (US\$0.58m), Banshkali (US\$ 1m), Dulhazara (US\$ 1.5m), Modhupur (US\$ 1m), Kaptai (US\$ 1.5m) and Sitakunda (US\$ 0.5).

And the rate of increase in paying visitors at these sites provided a telling glimpse into the demand for a nature experience from the Bangladeshi population. Even in 2003, the number of paying weekend visitors to the small Dulhazara Safari Park exceeded 20,000, while the small Sitakunda Eco-Park was receiving 15,000 paying visitors



*Visitors to the PA are increasing rapidly, while the size of the PA are small. Here, in 2003, advertisements are broadcast to visitors by a car driving through the Lawachara National Park. [Philip J. DeCosse]*

<sup>1</sup> The International Ecotourism Society defines ecotourism as: “responsible travel to natural areas which conserves the environment and improves the welfare of the local people”. See their official website for more detail.

in a single day. Clearly, the demand to escape from the confines of urban areas and visit nature was of great interest. However, in spite of their popularity for middle class visitors, Eco-Parks became highly criticized by early 2004, with objections based on their lack of integration into the local social or environmental context, the poor quality of construction interventions, and their lack of legal basis, among other reasons.

The socio-economic and cultural context at Nishorgo's five pilot sites differed from national and rural averages in a number of specific ways (Hossain 2007). Perhaps the starkest difference is in the religious and ethnic composition of the population at the Nishorgo Protected Areas, where a higher proportion of non-Muslims and non-Bengali peoples reside. Although the proportion of Adivasi (indigenous) population in each of the Districts where Nishorgo sites are found is under 2.5 percent, the average proportion of Adivasi living around Nishorgo sites is 14 percent, with this going up to 32 percent at Rema-Kalenga Wildlife Sanctuary. Although at the national average level, 90 percent of the population is estimated to be Muslim by religion, the average at Nishorgo pilot sites was only 77 percent, with the other religions including Hindu, Buddhist and Christian (Hossain 2007). So, the Nishorgo sites tended to be more ethnically and socially diverse than the national averages.

Education levels at Nishorgo sites are generally higher than national rural averages, with greater literacy at all Nishorgo sites (except Teknaf) than national rural averages. In rural areas across the country, 58 percent of men and 66 percent of women had not completed five years of school. At each of the Nishorgo sites other than Teknaf, educational attainment was better than these national averages. However, the population at Nishorgo sites that had completed more than five years of school is more comparable to the national averages, with those completing over nine years of education virtually the same inside and outside Nishorgo sites (Hossain 2007). These site averages, however, hide inequities in the social structure around pilot Nishorgo PAs, among them being marginalization in education and health access of the Adivasi population.

While education levels are generally better at Nishorgo sites, access to clean and safe drinking water is generally worse, not least because the Nishorgo sites are generally in upland forest areas with more difficult to access water tables. Also, average estimated income levels are lower at all Nishorgo sites compared to rural averages, and evidence indicates that landlessness is generally on the rise at all sites other than Lawachara, which shows a slight drop (Hossain 2007).

## Conclusion

The Nishorgo experiment thus began at a time when PAs and associated wildlife conservation on forest lands were under an accelerating threat of degradation from a growing economy and an underinvestment in skills and systems for PA management and protection. Yet, in 2003, important efforts in improving participatory resource management were being implemented in the Forest Department and other government departments. And a growing middle class had started to demonstrate its interest in visiting nature, especially in mass tourism to nature areas. Nishorgo's genesis thus took place in a time of unique threats in terms of poverty, institutional gaps and a rapidly growing economy, but also a time of unique opportunities.

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