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# Elements of Co-Management: Alternative Incentives and Incomes





*Kaptai*  
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## Approach to Stimulation of Alternative Economic Incentives

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Surveys undertaken at the beginning of the Nishorgo Support Project (NSP) showed that 300,000 people were then living in the immediate vicinity of the five pilot Protected Areas (PA), and that over 80 percent of this population could be categorized as “poor or “ultra poor” following Government of Bangladesh definitions (Mollah 2004a-e). Given this large number of inhabitants in the immediate vicinity of the five target PAs, the Nishorgo effort would need to be careful and targeted in its use of resources to stimulate alternative economic opportunities.

The purpose of this chapter is to explain the logic of Nishorgo’s strategy for introducing economic interventions in ways that would be consistent with biodiversity conservation.

### Options for Economic Interventions

The Government of Bangladesh Development Project Proforma (DPP), drafted in 2004 and approved in 2005, fixed the Government-sanctioned activities that would be financed under Nishorgo (Forest Department 2005). The DPP, though supported through contributions of the Nishorgo Support Project, was an output of the Government, and in this sense reflected the Government’s priorities. The Nishorgo DPP called for introduction of microfinance as the principal strategy for provision of alternative income opportunities in and around the PAs. That such a high priority was given to microfinance provision as a core strategy for livelihood improvement is not surprising in light of the broad use of microfinance by Bangladesh’s leading NGOs. Indeed, the enormous success in Bangladesh of microfinance institutions (MFI) – notably Grameen Bank, BRAC, and many other NGOs – has raised the profile and importance of microfinance.

Even at the earliest stages of Nishorgo team formation in 2004, it was assumed by partner NGOs and Forest Department participants that economic interventions would focus principally on the use of microfinance to accompany new economic activities. The field staff of partner NGOs were eager to start by adopting a familiar approach: forming groups that would receive microcredit, and then making these groups the primary participants in the biodiversity conservation process.

Offering microfinance to project beneficiaries has become a central feature of the way NGOs work in Bangladesh. Not only had leading Bangladeshi NGOs (e.g., BRAC, Grameen) demonstrated the potential of microfinance at creating new opportunities for households, they had also demonstrated the extent to which microfinance could contribute to the longevity of the NGOs themselves. NGOs that receive microfinance from donor organizations can then finance their own operational costs for years to come, even as they win new projects. It is not surprising then that Bangladeshi NGOs in recent decades have placed a relatively greater emphasis on economic activities and a lesser emphasis on governance, advocacy and empowerment activities (Feldman: 2003).



*Rapid growth in nature tourism -- evident in this lineup of buses at Lawachara -- represented an economic incentive but also an important risk to be managed. [Nishorgo Support Project]*

In light of the interest and attention given to microfinance, the Nishorgo team made the decision to avoid commitment to a microfinance strategy, at least until co-management governance formation and other social mobilization activities could evolve. The team feared that a microfinance emphasis would crowd out interest in other economic development opportunities that might not require microfinance.

At an early stage, the Nishorgo team commissioned three studies to deepen its understanding of available

options for economic interventions. Technical experts from the USAID JOBS/Iris project undertook an assessment of low, medium, and high priority value chain interventions (JOBS 2004). At the same time, Nishorgo partner NGOs (Community Development Chittagong, or CODEC, and Rangpur Dinajpur Rural Services, or RDRS) responsible for field level activities respectively in the south and the northeast were asked to develop a plausible list of the high priority household or group level “alternative income generation” (AIG) interventions. In addition, with co-financing from German Technical Co-operation (Deutsche Gesellschaft für Internationale Zusammenarbeit or GIZ), the Nishorgo team reviewed the options for intervening in alternative and renewable energy supply in ways that would create new economic opportunities and also reduce biomass dependence on the neighboring forests (Prokaushali Sangsad Ltd 2005). Based on these assessments, plus the team’s knowledge of other viable economic opportunities, 10 broad categories of potential economic interventions were identified:

- 1) *Developing nurseries:* This included establishing nurseries of indigenous and fast growing trees in local demand. The sale of saplings was already well established in local markets with much of the demand from local people wanting trees in their homesteads.
- 2) *Participatory plantations and assisted natural regeneration:* This involved directing responsibilities and benefits to local people for existing and new buffer plantations and strip plantations, located on PA land and public (khas) land respectively.
- 3) *Community patrolling and protection:* Because of the heavy pressure on forests in the PAs it became clear early on that a special cadre of community members would need to be directly engaged in protecting forests. Although the form of benefit for these patrollers varied, it was generally agreed that this would be explicitly remunerated employment, either in kind or in cash, because patrol groups would come from among the poor who depended on the nearby forests for their subsistence, and because patrolling would involve a significant amount of their time.

- 4) *Household income generation initiatives:* The interventions included a standard package that NGOs had delivered via their group-based microfinance activities in other parts of the country. These interventions, generally referred to by NGOs as “AIG,” were areas in which the partner NGOs already possessed considerable expertise, at least at the level of introducing the technologies to group members and households.
- 5) *Nature tourism enterprises:* The Nishorgo team recognized early on that support to biodiversity-linked micro-enterprise development associated with nature tourism would be a likely part of the project’s activities. The favorable impacts of eco-tourism on local community development have been recognized internationally. However, a cautious approach was needed as biodiversity conservation could not be compromised in the process of eco-tourism development.
- 6) *Branding and market value chain:* The project team planned to select one or more value chains for intervention as recommended by the JOBS/Iris study (2005). One such intervention was in the development of a value chain focused on the ethnic cloth production of the Tripura and Rakhaine people at the northern and southern sites respectively. Later it was decided to add an additional value chain linking bamboo nursery development, bamboo clump management, bamboo products development, and their marketing.
- 7) *Carbon sequestration financing:* By the second year of the project, the Nishorgo team decided to package and attempt to sell a carbon sequestration project at Chunati Wildlife Sanctuary. The considerable potential of Chunati WS to sequester carbon through reforestation and natural regeneration represented an important potential sustained financing opportunity for the Co-Management Organization (CMO) and the local population.
- 8) *Capital grants to communities:* Throughout its economic intervention activities, the Nishorgo Support Project attempted to work closely with the CMOs. But in spite of such cooperation, most alternative incentive activities were delivered directly by the Nishorgo team to targeted beneficiaries. The team recognized, however, that some interventions to support economic livelihoods should come directly from the CMOs themselves without any Nishorgo Support Project personnel as



*Investments that would provide benefits to a large proportion of the population were assumed to generate more broad-based support for the program. Here, an access road at Dolubari village near LNP [Tareq Murshed]*

intermediaries. Accordingly, a “Landscape Development Fund” was put at the disposal of the eight CMOs as a means of designing and implementing projects.

9) *Microfinance facilitation*: After consideration, the Nishorgo team decided not to directly deliver microfinance to stakeholders around the PAs. The team did, however, work to leverage existing microfinance providers to support deserving households. Nishorgo partner NGOs were encouraged to include project villages under their existing microcredit programs.

10) *Fuel wood consumption and energy technology*: Nearly all households living around the pilot PAs used fuel wood from the nearby forests for their household cooking needs. The potential to simultaneously reduce household energy costs and reduce pressure on forests compelled the team to explore options for modifying household energy usage. It was assumed that such economic and technical interventions might be executed in a way that would provide new economic opportunities.

## Considerations and Criteria in Prioritizing Interventions

From across these potential economic interventions, the Nishorgo team needed to identify a manageable mix of income generation interventions to pursue. In making those choices, a number of considerations and guiding criteria were kept in mind. Each type of intervention was assessed against a basic set of criteria developed from field experience and lessons learned from other countries, as included notably in Salafsky and Margoulis (1999), Salafsky and Wollenberg (2000), and Wells and McShane (2004).

The first and most elemental criteria was the simple approach of “doing no harm.” The Nishorgo team explicitly reviewed new proposals with this criterion in mind and rejected any that were likely to have negative impacts on the PAs. A number of interventions had been proposed that had a high probability of causing lasting damage to the PAs. One good example of this was the cultivation of orchids. The climate and forest conditions at the northern PAs – and particularly Lawachara National Park – make it an ideal area for orchid growth. In the rainy season, wild orchids cascade from the trees in Lawachara NP, and these orchids provide one important attraction of the forest. Already, though, wild orchids were being illegally extracted from Lawachara NP. A proposal was made for ex situ cultivation of orchids in the immediate area. It was clear, however, that the likely result of this market development would have been increased extraction of wild orchids. Taking (stealing) orchids for free from the wild would have been less costly than cultivating them, so the idea was almost sure to do harm to the National Park and its forest. Similarly, promotion of goat rearing was discarded since it was likely to have a negative impact on forest regeneration, a likely result of increased goat grazing within PA boundaries.

Four screening questions, or criteria, were used to assess potential additional economic interventions:

1) *Does the sustained success of a given economic activity require that the PA remain well-conserved?* Most standard household or group interventions were initially suggested

to augment the income of beneficiaries without investigating either positive or negative impacts on the nearby PA. Chicken or cow rearing, tending vegetable gardens, and other such interventions can no doubt contribute to the welfare of beneficiaries. But the team also focused on whether the proposed activity would be put at risk if the PA was degraded.



*Rickshaw drivers were trained as nature guides for tourists on the west side of Chunati Wildlife Sanctuary, where rickshaws commonly carry tourists into the Banshkali area. [Philip J. DeCosse]*

- 2) *When would the economic activity be likely to demonstrate visible impact and generate positive returns for participants?* In light of the high incidence of poverty amongst target beneficiaries, the team would need to ensure that many of the interventions would provide positive and visible economic returns within a one year time horizon. And yet it was recognized that the benefits from some of the most important interventions – particularly participatory forest management – would only accrue after several years.
- 3) *What is the likelihood of the economic activity being sustained and growing independent of project support?* Some of the potential interventions were more likely than others to be replicated, independent of the Nishorgo team's presence. Where interventions were made in existing products, services, and value chains, it was believed that the likelihood for sustained replication independent of project financing would be greater.
- 4) *To what extent would participants in the new economic activity associate that activity with the support of their Co-Management Organizations?* An important consideration revolved around the perceived role of CMOs in supporting economic interventions. The team intended for participants to recognize new economic opportunities as supported by or even initiated through the conservation efforts of the CMOs. To the extent that participants recognized the contribution of their CMO in providing economic opportunities, the overall goals of the CMO – conservation of the PA – would be more effectively achieved. This criterion was proposed because of an observed risk that some NGO field staff might introduce new AIG opportunities as though it were being done through the benevolence of their NGO rather than through any association with the CMO and conservation.

The range of possible interventions in the Nishorgo pilot sites were regularly weighed against these criteria. The outcomes of the review process are summarized in the following table, with the second-to-last column indicating whether or not the intervention was pursued by the project.

## Evaluation of Proposed Economic Interventions

General type of economic intervention	Examples of specific interventions	Criteria				If implemented	Note
		Dependence of the activity on sustaining conservation	Timing of visible economic impact	Likelihood of value chain linkages and replication	Potential status benefits for CMO		
Tree nurseries	Nursery enterprises	Medium	Short-term	Strong	Weak	Yes	
Participatory plantations and forest management	Buffer zone social forestry	Strong	Medium-term	Strong	Strong	Yes	Participants had to take on protection obligations in return for plantation rights.
	Buffer zone medicinal plants	Strong	Long-term	Medium	Strong	No	Limited understanding of medicinal plants value chain.
	Habitat restoration plantations with thinning	Strong	Long-term	Medium	Strong	No	After long debate, not permitted by the Government.
Community patrolling	Direct in-cash or in-kind payments to patrollers	Strong	Short-term	Strong	Strong	Yes	
Household / group income generation	Beef cow fattening	Weak	Short-term	Small	Weak	Yes	Little/no risk of grazing in the PAs.
	Milk cow rearing	Weak	Short-term	Small	Weak	Yes	Little/no risk of grazing in the PAs.
	Poultry rearing	Weak	Short-term	Small	Weak	Yes	
	Nursery	Strong	Short-term	Medium	Weak	Yes	Saplings would be sold in local market and for plantations.
	Low cost tree sapling distribution	Strong	Long-term	Small	Strong	Yes	Tree saplings were sold to thousands of households in buffer areas for future fuel wood or timber needs.
Nature tourism	Nature tourism eco-cottage	Strong	Medium-term	Strong	Medium	Yes	
	Eco-guiding	Strong	Short-term	Strong	Strong	Yes	
	Service enterprises in the PAs	Strong	Short-term	Strong	Strong	Yes	Includes sales concessions. Not yet approved by Government.
	Elephant rides	Strong	Medium-term	Strong	Strong	Yes	



General type of economic intervention	Examples of specific interventions	Criteria				If implemented	Note
		Dependence of the activity on sustaining conservation	Timing of visible economic impact	Likelihood of value chain linkages and replication	Potential status benefits for CMO		
Branding and value chain	Ethnic branded cloth products	Strong	Short-term	Strong	Medium	Yes	Became the "Tripura Gift Collection."
	Date/palm leaf baskets	Medium	Medium-term	Medium	Medium	No	Not pursued because staff resources limited.
	Bamboo cultivation / processing	Medium	Short- to medium-term	Strong	Medium	Yes	
Carbon sequestration financing	Chunati carbon project	Strong	Long-term	N/A	Strong	Yes	Project documents completed but awaits financing.
Capital grants to communities	Access to capital via Landscape Development Fund	Medium	Short-term	N/A	Strong	Yes	
Access to capital - microfinance facilitation	Linkages to existing MFIs	Small	Short- to medium-term	N/A	Small	Yes	
	CMO led microfinance	Strong	Long-term	N/A	Strong	No	CMOs were not institutionally strong enough to manage microfinance.
Fuel wood reducing technologies and markets	Improved stoves installation enterprises	Strong	Short-term	Medium	Weak	Yes	
	Biogas plants	Strong	Short-term	Small	Medium	Yes	Implemented only at two madrasah

Note: Categories used: Short-term defined as within 1 year; Medium term defined as  $1 < x$  years  $< 3$  years; Long-term defined as greater than 3 years.

## Lessons Learned from the Process of Selecting Project-Supported Economic Interventions

Specific lessons were learned from each of those intervention areas, and those lessons are summarized here and reviewed in greater detail in subsequent chapters:

*Where possible, select interventions that raise the status of Co-Management Organizations (CMO). Investments made through the Landscape Development Fund (LDF) became*

increasingly important, not so much because of the size or impact of this investments, but because they raised the stature, recognition and skills of the CMO themselves. LDF investments focused principally on activities that could affect a large portion of the local population. Common investments identified by the CMO included libraries, access roadways, pond development for aquaculture, small bridges, rural roads, and community plantations. Each of these investments was clearly marked as a gift of the CMO to the people of the area, and in this way was a means of associating the co-management effort with the well-being of the community.

*Invest early in building brand identity associated with Protected Areas.* The concept behind the Tripura Gift Collection was to brand and add value not only because of the beauty of the Tripura cloth, but also because the Tripura people earn their livelihood in and around the PAs. Nishorgo's test was to use this branding to make Tripura cloth more valuable than similar cloth produced with no association to forests or protected areas. Similar efforts were pursued in branding and attempting to add value to the "Nishorgo Eco-Cottage Network" and to products sold at PA kiosques.

*Direct the more expensive interventions towards those households or individuals that are to be directly involved in protection or conservation efforts.* Initially, beneficiaries were identified using standard group formation criteria used by partner NGO, irrespective of whether the group members were directly engaged in PA conservation activities. There existed a reticence within the implementing team to depart from what are standard NGO beneficiary identification procedures. It became increasingly important to ensure that beneficiaries were selected first and foremost from those involved in patrolling or protection or from those that lived within or immediately adjacent to the PA, and would thus be most affected by a reduction in access to the woody biomass inside the PA.

*Maintain a high degree of emphasis on participatory plantations and habitat restoration activities, as they offer the greatest single means of combining livelihood and conservation objectives.* These were made a high priority because of the potential suite of positive associated benefits. Initially, those receiving access to plantation or habitat restoration opportunities were not asked or required to take part in PA management or conservation work. Learning from this gap, the project placed an increasing focus on ensuring that all those gaining access to such opportunities would have their benefits made contingent upon conservation and protection activities.

Develop some interventions that will benefit a large proportion of the population, even if the per person benefits from those interventions may be small. As the introduction of alternative livelihood opportunities progressed, it became increasingly clear that the high cost of introducing such opportunities would make it difficult for the project to reach even a majority of those immediate residents in and around the PA. Accordingly, the team recognized and prioritized a number of interventions which would generate a small economic benefit but be widely available. Although the household benefits from improved stoves and low-cost sapling sales, for example, were small, both of these activities were actively supported by the project and welcomed by the communities because they offered some tangible benefit and at the same time raised awareness of the CMO's efforts to support the broader community. The same was true of a number of the low-cost Landscape Development Fund (LDF) grant projects led by the CMO.

## Conclusion

This chapter has described the overall approach for Nishorgo's alternative economic incentives activities, and identified a number of lessons learned from that process. In subsequent chapters, lessons are drawn from the specific strategies for implementing elements of this alternative incentive strategy program, covering incentives for community patrolling, nature tourism, labeling and value chains, carbon sequestration, capital access and energy use.

## References

- DeCosse, Philip J. 2006. *The Role of Alternative Income Generation (AIG) Activities in Nishorgo's Strategy for Conservation of Protected Areas (PAs)*. Dhaka: Nishorgo Support Project.
- Feldman, Shelley. 2003. Paradoxes of Institutionalization: The Depoliticisation of Bangladeshi NGOs". *Development in Practice* 13:1, 5-26.
- Forest Department. 2005. *Nishorgo Support Project Project Proforma (2004-05 to 2009-10)*. Dhaka: Forest Department, Ministry of Environment and Forest, Government of the People's Republic of Bangladesh.
- JOBS. 2004. *Pre-Assessment of Enterprise Development Opportunities Associated with Pilot Protected Areas of the Nishorgo Support Project*. Report prepared by JOBS: a project of the IRIS Center University of Maryland, USA. Dhaka: Nishorgo Support Project of Forest Department.
- Mollah, A.R. and Kundu, D.K. 2004a. *Site-Level Field Appraisal for Protected Area Co-Management: Lawachara National Park*. Dhaka: Nishorgo Support Project of Forest Department.
- Mollah, A.R. and Kundu, D.K. 2004b. *Site-Level Field Appraisal for Protected Area Co-Management: Rema-Kalenga Wildlife Sanctuary*. Dhaka: Nishorgo Support Project of Forest Department.
- Mollah, A.R., Kundu, D.K. and Rahaman, M.M. 2004c. *Site-Level Field Appraisal for Protected Area Co-Management: Satchuri Reserve Forest*. Dhaka: Nishorgo Support Project of Forest Department.
- Mollah, A.R., Rahaman, M.M. and Rahman, M.S. 2004d. *Site-Level Field Appraisal for Protected Area Co-Management: Chunati Wildlife Sanctuary*. Dhaka: Nishorgo Support Project of Forest Department.
- Mollah, A.R., Rahaman, M.M. and Rahman, M.S. 2004e. *Site-Level Field Appraisal for Protected Area Co-Management: Teknaf Wildlife Sanctuary*. Dhaka: Nishorgo Support Project of Forest Department.
- Margoulis, R. and N. Salafsky. 1998. *Measures of Success: A Systematic Approach to Designing, Managing and Monitoring Community-Oriented Conservation Projects*. Washington DC: Island Press.

- Prokaushali Sangsad Ltd. 2005. Appraisal of Patterns and Options for Change of Energy Use in and Around Selected National Parks, Report co-financed by Nishorgo and GIZ's Promotion and Use of Renewable Energies (PURE) Project. Dhaka: Prokaushali Sangsad Limited.
- Salafsky, N and E. Wollenberg. 2000. Linking Livelihoods and Conservation: A Conceptual Framework and Scale for Assessing the Integration of Human Needs and Biodiversity. *World Development* 28 (8): 1421-1438.
- Wells, M. and T. McShane. 2004. Integrating Protected Area Management with Local Needs and Aspirations. *Ambio* 33 (8): 513-519.