

Incentives for Community Patrolling and Protection

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The Nishorgo effort began with an assumption of a “win-win” solution that would meet the needs of those people who had been extracting from the Protected Areas (PAs) and also ensure core zone conservation. By 2005, it had become clear that this approach was no longer a viable option, due to the nature and scale of forest produce extraction and the exclusion of those involved with that extraction from the co-management framework. The demand for timber – particularly Teak – from pilot PAs with significant standing forests (principally Lawachara National Park and Rema-Kalenga Wildlife Sanctuary) became very high by 2005. Extraction rates, due to well-armed and backed felling operations, scaled to heights not before seen in these areas. There was little that even the most scrupulous Forest Guards or well-organized Co-Management Committees (CMCs) could do against such operations.

At any of the five pilot PAs, one could find streams of people carrying loads of fuel wood to truck loading sites at the edges of the PAs. A field study from 2005 (R. Sultana, 2007) on the 243 ha Satchari National Park estimated a daily extraction rate of fuel wood of 2 tons, with most of this being loaded on trucks bound for Comilla and Dhaka. This illegal activity was coordinated by well-organized commercial operations, typically hiring local day labor from nearby tea estates.

It had become clear that extraction of forest resources from PAs was happening so fast with such diverse and non-local beneficiaries, that a negotiated benefits-sharing agreement with all involved extractors was not an option any more. The Forest Department (FD) realized that it had to patrol and protect jointly with the new CMCs for effective protection. Not only was the small staff of Forest Guards insufficient against organized commercial extraction, but the rapid loss to the pilot PAs posed a serious credibility problem to the entire co-management effort. The Project risked spending its time working out a shared governance agreement of co-management while the forest disappeared.

Accordingly, Forest User Group (FUG) formation was modified. Initially it was assumed that Alternative Income Generation (AIG) through skill development training for groups of poor women would create a social force in favor of conservation while reducing the actual extraction from the forest. The focus was changed to “Community Patrol Groups” (CPG) that would receive livelihood benefits in return for taking a direct role in forest protection.

This chapter begins with a summary of the approaches and issues at each site. It then proceeds to a number of lessons learned and conclusions that emerged from the process.

Starting Assumptions and Subsequent Adaptation

The pressure and leadership for creating these Community Patrols came from senior staff of the FD. They recognized that bad news of rapid forest loss in the PAs would be directed to them as the statutory authority, and that it would support those interests opposed to participatory

PA management from the beginning. Internal orders were thus issued to Divisional Forest Officers to begin immediately to support formation of these patrols, beginning with Lawachara National Park.

Initial attempts to form Community Patrols met with resistance from the FD field staff, but with support from senior FD staff, the patrolling moved forward. The Divisional Forest Officer (DFO) of Sylhet Forest Division, under whose jurisdiction three of the five pilot PAs are located, was initially reluctant to accept the concept of community protection, arguing that sufficient legal provisions were not available to allow non-Forest Department staff to patrol public forest lands. He argued that responsibility and liability in the case of a casualty of a community patroller was not clear. Would he as DFO be responsible if someone were to be hurt?

The differing forest landscape of southern and northern PAs meant that community patrolling approaches would also differ. Northern pilot PAs, though small in area, have higher tree density and so are subject to high incidences of illicit felling for timber and fuel wood. On the contrary, the two southern pilot PAs are large and more degraded forests where mounting intensive community patrolling would have been difficult. General elements of the approach include providing patrolling equipment including torch, whistle, battery, uniforms, and boots to the CPG members; and Nishorgo Support Project (NSP) motivation and public awareness activities. A review of the approaches taken at each site explains the diversity of approaches required.

Site Approach: Lawachara National Park

The Park is surrounded by 22 villages that put enormous biotic pressure on its forests. Local people are involved in unauthorized exploitation of timber and fuel wood for cash sale in nearby towns such as Srimongal and Kamolganj. Stakeholders' consultations revealed that it would not be possible to extend effective forest protection without involving local people from these 22 villages.

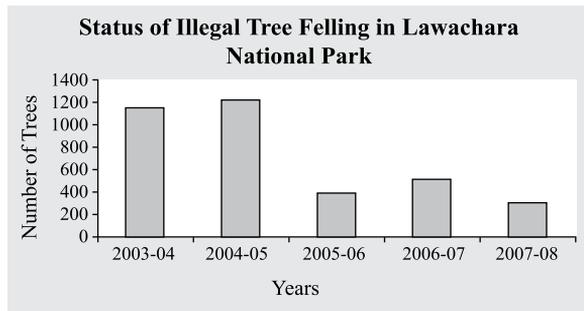
Based on consultations, the Park was divided into four patrolling sectors. Consultations were held with the members of existing FUGs (40 groups with a membership of 536 households) to identify who could take up responsibility for protecting each of the four identified sectors. An eight-member CPG from Lawachara Forest Village assigned by the *Mantri* (village chief), and a 10-member CPG in Magurchara Sector were designated for forest protection since they were already helping FD in their patrolling efforts. They were responsible for protecting Lawachara and Magurchara forest sectors respectively. These two groups have since been providing effective protection to the assigned areas.

Dolubari village, located on the southern periphery of the Park, was identified as having an important stake in the Park's forests because of the villagers' substantial dependency on the neighboring forests. Two FUGs, one each for Muslim *para* (a settlement or neighborhood within a wider village) and Tipra *para*, were formed under NSP for implementing AIG activities. The members of Muslim *para* FUG, some of whom were earlier involved in illicit felling activities, were successfully convinced to take up joint community patrolling in the southern sector. Unlike Lawachara and Magurchara Forest Villages (who have traditional authority

to extract some benefits from the Park), no formal benefits accrued to the members of Dolubari FUG and so they demanded wage payments for their forest protection efforts. Full wage payments for community patrols were not, however, favored, as they would result in unsustainable dependency. Later, it was agreed that the community forest protection efforts would be linked with socio-economic development through AIG activities. Each month Tk. 45,000 (about US\$ 660) was deposited in the FUG bank account to be used for community development activities. Accordingly the FUG members received skill development training and demonstration grants for identified AIG activities.

The organization of community patrolling proved time consuming in the Park's northern sector where there is intense pressure on the residual patches of Teak from two neighboring villages – Baghmara and Baligaon. The inhabitants of these two villages were divided along political party lines, and some of the villagers were themselves actively involved in illicit felling of valuable Teak trees. Achieving an early consensus on community patrolling did not prove easy, as expected. Field visits revealed that several local elites wield influence over these villages and so they were contacted personally. In view of the strong influence of the current Chairman and ex-Chairman of Kamolgonj Union Parishad, it was decided to request them to nominate 10 young people from each of the two villages for community patrolling. Accordingly, a two-member CPG, with equal numbers of members from each of the two villages, was formed by following the same payment mechanism as the Dolubari sector. The CPG was subsequently also constituted as a FUG in order to extend AIG assistance to its members.

After forming the four CPGs, illicit felling reduced considerably in Lawachara (see the graph below based on FD records; although the total numbers of trees lost may be underestimated the method was consistent so the trend is considered reliable). The four CPGs are now being supervised by the Co-Management Committee. Leaders of all the four groups meet every month to coordinate patrolling activities. A female Patrol Group, formed in 2007 by mobilizing 20 willing women from Baghmara and Baligonj villages, patrols nearby forests during the day time. More importantly, the patrol members are involved in persuading fellow villagers not to engage in illicit tree felling.



Community Patrol Group members have successfully managed to reduce the rate of illicit tree felling in the Lawachara National Park since their formation. [Nishorgo Support Project]

Site Approach: Rema-Kalenga Wildlife Sanctuary

The forests in Rema-Kalenga Wildlife Sanctuary have suffered from smaller numbers of illegally felled trees per hectare in the past four years than Lawachara National Park, principally due to its remote location and poor road linkages, although numbers of trees lost fluctuate between years. The project identified 23 villages with stakes in the Sanctuary. Because the Sanctuary is a strip of forest along the border with India, Bangladeshi smugglers bring their produce out through roads that can be monitored easily by the Forest Department. This means that instead of round-the-clock patrolling inside the forests, smuggling of timber can be checked by closing main entry and exit routes. In light of this, CPGs were formed around the identified exit and entry routes. They were subsequently organized as FUGs in order to cover them under AIG activities. In other areas, FUGs, formed by involving local poor dependent on nearby forests, have been helping FD field staff, particularly in providing intelligence.

Site Approach: Satchari National Park

The Park's forests, though rich in biodiversity, are less prone to illicit felling, mainly due to lack of valuable timber trees such as Teak. Forest protection efforts are required mainly to check unauthorized removal of fuel wood by commercial interests and forest dependent local people.

The Tripura Forest Village, having 24 households and located within the Park, was identified to form a Patrol Group that would patrol jointly with the FD field staff. The women of the village are involved in AIG activities *in lieu* of their help in stopping illicit removal of fuel wood from the Park's forests. In addition, a total of 41 FUGs have been mobilized by including 560 households from 28 neighboring villages. Incidences of illicit felling have decreased substantially as evident from the Offence Registers maintained by FD (cross-checking indicates that these give reliable estimates of trends).

Site Approach: Teknaf Wildlife Sanctuary

Forest degradation has occurred in the Teknaf Wildlife Sanctuary mainly due to heavy biotic pressure from the huge population of the many villages/*paras* located in and around the forest, including Rohingya refugees from Myanmar. A large number of trees – mainly Garjan, Teak, and Telchur – were uprooted during the cyclones of 1991 and 1994. Authorized clearing of this deadwood became an entry point for large-scale additional felling.

Today, the dispersed patches of residual forest need protection against illicit removal of valuable trees such as Garjan. A Garjan forest patch in Silkhali sample plot has been jointly protected by a 13-member Forest Protection Committee of local people and FD field staff since August 2002 (that is, prior to the Co-Management Committee formation).

Nishorgo staff held consultations with this Baharchara Committee. It was decided to form three CPGs, each comprising 49 persons from amongst local people, FD field staff, and committee members. Members of the CPGs rotated night protection duties among seven member teams so that each member worked one night per week. All the three groups – excluding FD staff – were formalized as FUGs to gradually associate them with AIG activities.

Large CPGs, mainly those with 49 members, were similarly formed and mobilized to protect residual forest patches in Whykeong and Teknaf Ranges. A female CPG, formed from Karongtoli Forest Village, is protecting nearby forests by refraining from collecting fuel wood and timber, and motivating/obstructing others from illicit removal of forest produce. After imparting skill development training, the women members were provided with demonstration grants for starting AIG activities (fish culture, nursery development, poultry rearing, vegetable gardening, etc.).

Site Approach: Chunati Wildlife Sanctuary

Chunati Wildlife Sanctuary originally supported mixed evergreen and semi-evergreen forests that have over many years become substantially degraded; only a few scattered patches of Garjan trees remain. There are 70 *paras* in 15 villages in and around the Sanctuary. The FUGs, formed around the residual forest patches were expected initially to help FD field staff in forest protection. For example, the Bonpukur Garjan forest patch was rapidly degrading due to illicit felling by the inhabitants of neighboring *paras*. FUGs were subsequently formed, and were helped through AIG activities for which monetary and technical assistance was provided under NSP.

Though formed in the areas where illegal felling had been occurring, these FUGs were unable to prevent outsiders, particularly organized smugglers, from illicit felling. Accordingly, a CPG comprising 20 male members from the local *paras* (located around the Garjan patch) was formed and made responsible for community patrolling under the supervision of two Forest Guards. The strength of this CPG was increased to 35 members so that one team of five persons could patrol each day by rotation. These members were also involved in AIG activities. Another CPG was formed to protect nearly 200 ha of forest area with existing Garjan, Akashmoni, and Eucalyptus in the Chambal Beat of Jaldi Range. Similar CPGs have since been formed in Chunati and Jaldi Ranges. Local people, who cut the sapling mainly for firewood, were motivated to allow the saplings to grow. NSP provided them with skill development training and demonstration grants. Elephant habitat fragmentation, due to encroachment of forest land, was checked by making local people aware about the future potential of the Sanctuary – particularly for eco-tourism, due to its strategic location (halfway between Chittagong and Cox’s Bazar – two important tourist cities).

Benefits to Patrollers

The Project team started with a three-part deal that could be worked out with identified local patrol group members under which: (a) they would provide their labor to protect the core zones; (b) they would be remunerated with access to nearby buffer area plantations; (c) their receipt of benefits from buffer plantations would be based on being active and upstanding members of patrol groups. To formalize this arrangement, the Project developed a format for “Participatory Conservation and Benefits Sharing Agreements” (PCBSA), an adaptation of the well-accepted and formalized Participatory Benefits Sharing Agreements used for simple social forestry operations.

As it evolved, four critical obstacles slowed the use of the PCBSA covering buffer plantation participation as an incentive for the patrollers:

- Neither CMC members nor Forest Department staff systematically allocated existing social forestry plantation resources to those patrolling; rather, they prioritized the allocation of those resources to their preferred beneficiaries (friends or contacts).
- On most of the periphery of Nishorgo's pilot PAs, there is no adjacent Reserve Forest land that might be used for buffer zone plantations. Where PAs have suitable peripheral forest, it is often under the management of a different division of the FD, and thus unavailable for a role in PA protection through benefits-sharing.
- Although the language of approved management plans allowed for some benefit-sharing to participating community members within the PAs themselves (through silvicultural activities such as thinning operations), FD field staff systematically refused to allow any formalization of such benefits within the PAs, arguing that the Wildlife Act prohibited any extraction from core zones.
- The FD staff generally argued that any modification of the established Participatory Benefits-Sharing Agreements structure would require approval of new Social Forestry Rules.

Thus, the planned approach to benefit sharing did not play as important a role as intended. So what were the perceived and real benefits that contributed to the involvement of 1,200 patrollers across the Nishorgo sites and that stimulated a rapid rebound of biodiversity within monitored forest areas?

Of the full number of patrollers, only 30 (less than 1%) received direct financial payments for their work (at Lawachara's highest pressure areas, where armed felling operations required significant benefits to patrollers). The remaining 99% of patrollers received access to a benefit package supporting alternative incomes. These varied from participation in social forestry agreements in buffer areas to more common household-based livelihood activities (e.g., technical and financial support for vegetable gardening, poultry production, etc.). These benefits appear to be the primary driving force for involvement of community patrollers, but a number of other perceived benefits have been noted, including the following:

- Perception that future benefits would be forthcoming from a direct role in protection of the PA, principally from the right to extract biomass from thinning operations
- Enhanced status within the community as uniformed patroller
- Participation in social organization (patrol groups) and activities
- Receipt of clothes, torch lights, boots, and working equipment

It is at present too early to assess definitively whether the benefits to patrollers will remain sufficient in the coming post-project years to ensure active involvement. It is clear that overcoming the obstacles to formal involvement of community patrols in the PCBSA

framework should remain a highest priority without which it is hard to conceive a sustained patrolling effort. The only real and sustainable resource that the FD and CMC can conceivably allocate to support patrolling is access to productive forest land next to PAs in return for patrolling.

Guidelines and Processes for Patrolling

As the Project progressed, it has become increasingly important to formalize the guidelines and processes for patrol teams. Issues that have stimulated this urgency include the need for processes to follow when apprehending illegal fellers or extractors, processes for reporting to CMC and FD field staff, and the nature of penalties if patrollers become involved themselves with illegal extraction from the PAs.

In light of this need, the Project developed a number of systematic approaches, including a pocket guide for patrollers issued by the FD (Bangladesh Forest Department 2006).

Involvement of Foresters and Guards in Joint Patrols

As originally conceived, community patrols would move through the forest areas and then report back to the CMC and FD field staff on progress and findings. Initially, most patrols moved without participation of any FD staff which gave rise to a number of problems. Both FD staff and local interests (perhaps logging interests) began to accuse the community patrols themselves of taking a cut on illegal felling operations. On occasions when the patrols identified illegal fellers by name and location, the FD would learn about it after it had become difficult to track down the patrollers and/or apprehend them. As a consequence, the CPGs began to accuse the FD of laxity.

It thus became clear that the patrols would need to be in closer contact with the FD field staff, either through direct inclusion of FD Foresters and Guards during field operations or through a regular system of reporting by patrols to the FD staff (and CMCs). Though this collaboration of FD field staff and CPGs is still far from perfect, it has improved greatly and there has been some formalization of interactions and communication.

Full Time versus Part Time Patrolling

The northern site patrol teams operated as full-time workers for six days per week and 12-hours per day shifts, while southern teams operated only one day per week on a rotational basis. Of the six patrolling groups at northern sites, two received cash remuneration while the others received opportunities for AIG activities. At the southern sites, patrollers received alternative income opportunities.

It is not yet clear which of the two approaches – full-time or part-time – has been more effective at forest protection. This, too, would be difficult to measure, not least because the denser forests in the north are under a different, and more intense, pressure for felling and extraction than those thinner forests in the south.

When community patrolling started under Nishorgo, it was assumed – for the northern forests at least – that each patroller would receive a clearly defined agreement under which she or he would receive benefits in the immediate vicinity of the PA. Without a participatory benefits-sharing agreement being forthcoming for all patrollers, some other form of incentive is required. Even if participatory benefits are systematically allocated to each and every patroller, it may still not be sufficient to adequately remunerate the patrollers for their full time efforts.

Several observers have argued that regular payments of cash to two of the patrol groups in the north is fundamentally unsustainable when set against approaches with a greater degree of voluntary participation, or at least participation based on access to biomass rather than cash payouts.

However, experience indicates that the denser and more threatened forests such as those at Lawachara (where the two teams were paid in cash) require a greater degree of professional competence, regularity, and continuity from patrol teams. In dealing with armed and well-organized loggers, it is probably not appropriate to expect part-time community members to be equipped to handle complex issues such as systems for capture, apprehension, and evidence-gathering. If the patrollers are to work on a full-time basis, then their compensation for that work should be in keeping with the time and energy they have put in.

Where the economic value of the forest is high, as evidenced, for example, by attracting thousands of paying visitors, then it would seem logical to remunerate the patrollers in cash for their work, with funds derived from the payments made by these visitors who want to see an intact forest. Without a functioning entry fee collection and benefits-sharing system, however, it is not yet appropriate to extend this cash remuneration to full-time patrollers.

Women's Patrol Groups: A Distinct Approach

After a visit by CMC members to communities involved in PA participatory management in West Bengal, a number of female participants proposed to organize a similar effort in Bangladesh. This was initiated with the women of Mochoni near Teknaf and Baligaon village to the east of Lawachara. In these two places, the approach of the women has been different in a number of respects from the male patrol groups. The women, for example, spend relatively less time walking through the forest and more time going house-to-house in the periphery, at times trying to educate residents about the forest and at others, searching for people who have stolen logs or fuel wood from the PA. In both sites they have been far more social and interactive in their approach to supporting conservation through patrolling.



A cross-visit to West Bengal to observe communities involved in PA participatory management encouraged Bangladeshi women to get involved in patrolling. [Nishorgo Support Project]

Another important difference with the women patrollers appears to be their motivation for taking part. It appears that the women place a high value on the opportunity to associate with other women outside their homes in a socially acceptable activity. In villages where large women's gatherings are usually restricted to family events, this opportunity to meet and move through the forest in groups of 15-20 appears to be very attractive – more so than for the men.

Further research into the differences between men's and women's views of patrolling would be useful.

Lessons Learned

The following lessons have emerged from Nishorgo's efforts to engage community members through the CMCs for the purposes of patrolling Protected Areas:

Community patrols represent a viable means for slowing the pace of forest produce over-extraction from Protected Areas. Monitoring by the project and by the patrol members themselves indicates that tree felling and the rate of forest loss have been reduced.

Long-term incentives (benefits) for local poor people involved in patrolling are not well defined. Access to alternative livelihood support has been the main incentive, but is not linked with performance. FD and CMCs have been reluctant to designate rights to forest land-related benefits (such as use of buffer plantations or non-timber forest products) to patrol group members. A great challenge for the FD is to establish a positive linkage by coupling biodiversity conservation with land-based livelihood opportunities for local people. To date, neither CMCs nor the FD have taken a pro-poor stance.

The official sanctioning of joint community and FD patrolling sends an important message to surrounding areas that the local community – and not the FD alone -- has a central role to play in PA management. The presence of uniformed and sanctioned patrol groups throughout the forest sends a clear message that the FD is no longer the only official actor involved in PA conservation. In this sense, the presence of uniformed community patrols from surrounding areas may be as important for this communication purpose as it is for the reduction of illegal felling and extraction. Those fellers who tried to operate in the past through individuals from the FD or Ministry of Environment and Forests must now reckon with a larger and more diverse assortment of community representatives, rendering forest decisions more transparent than previously.

Official sanctions of community patrols by FD and CMC, and close cooperation or joint patrolling between community patrols and FD staff are necessary. This legitimizes community patrols, sends a message to the wider community that the community has been empowered, and makes use of the FD powers to apprehend potentially dangerous illegal loggers.

A future approach to participatory forest protection. Building on the community patrol lessons to date, a flexible approach to designing locally appropriate participation and patrol schedules for PAs that adheres to the following principles is needed:

1. Community patrol members come from the poor of villages adjacent to PAs.
2. Community patrols are authorized by and report to the CMC and its constituent FD representatives/ members.
3. CMC and FD liaise closely on patrols or operate joint patrols depending on the nature of forest PA exploitation.
4. Monitoring of habitat status is undertaken by community patrols, FD and other CMC members.
5. FD allocate rights to forest or other public land based benefits in adjacent “buffer” areas to community patrol groups in return for achieving standards of service agreed in the CMC.
6. Community patrol group leaders become members of the concerned CMC and any complaints or conflicts over patrols are handled in the CMC.

Conclusion

The Nishorgo team recognized early on that the diversity and rate of forest extraction precluded a “win-win” approach under which a wide range of community members would benefit as the forest became better conserved. CMCs, together with the FD, would have to take more dramatic steps to exclude some timber and commercial fuel wood extractors from the PAs without which the pilot PAs would be rapidly degraded and the credibility of participatory PA management would be called into question. Accordingly, community patrols were organized under the aegis of the CMCs and allocated access to benefits in return for their patrol work. There is little doubt that these patrol groups have been central to a turnaround in the health of the Nishorgo forest habitats. What is less clear, however, is the sustainability of the incentives for their involvement. A number of critical policy obstacles remain before such patrols can be associated through clear benefits sharing agreements giving access to buffer zone forest produce.

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