



## **Evaluation Report**

**Name of the project**  
**Restoration and Conservation of Biodiversity at**  
**Barind Dhamoirhat Sal Forest**

**Implementing entity**  
**Padakhep**



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### **Executive Summary:**

Sal (*Shorea robusta*) forest is the main plain land forest of Bangladesh. Due to rapid population growth this valuable natural resource has been degraded and facing danger because of huge demand for forest products. For the conservation of flora and faunal biodiversity of the Barind Dhamoirhat Sal Forest of Naogaon a project entitled “Restoration and Conservation of Biodiversity at Barind Dhamoirhat Sal Forest” had been implemented by PMUK with the financial support of ARANNAYK foundation. This evaluation was carried out to reveal the relevance, adequacy and sustainability of the outcomes in relation to the objectives of the project. Objectives of the project are following:

- Establishment of a collaborative management system (co-management) for Dhamoirhat Sal forest involving local communities, Forest Department (FD) and other stakeholders.
- Restoration of tree cover and biodiversity and sustainable management of the forest.
- Improvement of livelihood of the poor people living in and around the forests and their access to fuel wood through alternative means.
- Creation of opportunities for revenue generation from forest recreation or eco-tourism based activities benefiting local communities.

This evaluation report was prepared based on information gathered from project documents, project reports and visits to project sites. All types of relevant stakeholders (project staff, participants, community leaders, beneficiary group members etc.) were interviewed to know their perceptions on project activities and their expectation for the future project activities. The evaluator also visited, verified and assessed the physical achievements of the project mentioned in the progress reports and final reports.

The project is mainly based on “Training Approach” to the FUG (Forest User Group) in which it tried to aware the forest dependant people along with other locals about the importance of the existence of the Sal Forest. Institutions like Community Based Organization (CBO), Peoples Forum (PF) etc. have been established. A number of meetings had been conducted with the local community and FUGs as per the provisions and commitments of the project proposal about different aspects of conservation and importance of the Sal Forest. A number of trainings, workshops and exchange visits have also been conducted to enrich the knowledge and skills, awareness and attitude of the FUG members to sustain and improve their livelihood along with reducing forest dependency. Awareness programs like essay competition at schools, micking around the forest at different time of the year, rally on special days considering environmental and other important issues have also been arranged. As majority of the community surrounding the Dhamoirhat Sal Forest are extremely poor, besides awareness and training they need assistance in terms of capital. For a sustainable co-management of the Sal forest, future initiatives should concentrate on the capacity building of the local institutions like Peoples Forum and Community Based Organizations. FUG members should be provided with more pragmatic AIGAs (Alternative Income Generating Activities). There should be more frequent meetings and communications among project staff, community people and forest department officials.

## **Introduction:**

Bangladesh is the treasure house of forest plants due its geographical location. Among many other forest species, Sal (*Shorea robusta*) is of great concern in term of its current distribution and vulnerable situation. In most of the Sal forest areas of Bangladesh it exists in fragmented and depleted form. As most of the Sal forests are basically consists of Sal (*Shorea robusta*) as the main species, conservation of this species signifies conservation of the Sal forests which are of great environmental and ecological importance. Sal forests are valuable resources in Bangladesh but unfortunately it has been eroded in the recent years because of biotic interferences, shrinkage of land resources base, deforestation, lack of awareness of the people in and around the forest, insufficient support from the government and public policies and lack of appropriate management and protection steps taken by the government.

Rapid growth of population in the country causes negative consequences on its natural resources and Sal forest is one of the worst affected ecosystems. Sal being the main component tree species of Sal forest, its excessive harvesting affected other bio-communities of the forest badly. Due to over exploitation and fragmentation biological diversity of Sal forest is reducing at an alarming rate. The global biodiversity strategy recognizes the importance of conserving Sal forest biodiversity. Many of our Sal forest species are over exploited and will be extinct if they are not conserved or protected. Due to lack of awareness and proper care Sal forest plant and animal species are being lost. To reverse this adverse situation Arannayk Foundation along with forest department have come forward to halt the deforestation at Dhamoirhat Sal Forest and to support a project on restoration and conservation of the natural tropical forest blocks of this forest under Dhamoirhat beat of Paik Bandha range of Rajshahi forest division. Padakhep Manabik Unnayan Kendra (PMUK) is the implementing agency of the project at Dhamoirhat Sal Forest for restoration and conservation of the remaining Sal forest.

This evaluation was carried out to find out the relevance, adequacy and sustainability of the outcomes of the project in relation to its objectives. Different techniques were employed in the field to collect information from different types of stakeholders. Approaches used for information gathering was associated with the different informants' groups as summarized in Table 1.

**Table 1:** Informant groups and data collection tools employed

<b>Informant groups</b>	<b>In depth interview</b>	<b>Focus-group discussion</b>	<b>Participant observation</b>
Community (Project Participants)	—	√	√
Community (Project Non-Participants)	√	—	√
FD and NGO officials	√	—	—

Besides, project documents such as Project Proposal, Draft Project Report were reviewed and physical achievements were verified and assessed during field visits to fulfill the purpose of the evaluation.

### **Context and Objectives of the project:**

Rapid population growth with minimal forest resource is a common scene in Bangladesh. Like other Sal forests of the country, Sal forest of Dhamoirhat also badly required to be protected to let the existing ecosystem and biodiversity survive in its natural condition. Dhamoirhat Sal forest consists of 173.929 hectare and the core zone is managed by the Forest Department. People living in and around the Sal forest are mostly landless (63%) (Baseline survey) and the level of education is also remarkably poor (only 18% have primary education completed). Thus, to conserve this valuable forest on a sound manner, there is no second choice but to involve this poor part of population most of whom frequently use forest resources in their daily life. This project was initiated considering the restoration and conservation of biodiversity of the forest engaging the people living in and around the forest on such a manner that, these forest user groups will conserve the forest by their own. Considering the entire situation, the project was launched with the following objectives -

- Establishment of a collaborative management system (co-management) for Dhamoirhat Sal forest involving local communities, Forest Department (FD) and other stakeholders.
- Restoration of tree cover and biodiversity and sustainable management of the forest.
- Improvement of livelihood of the poor people living in and around the forests and their access to fuel wood through alternative means.
- Creation of opportunities for revenue generation from forest recreation or eco-tourism based activities benefiting local communities.

### **Project activities and outcomes:**

#### ***Objective 1: Establishment of a collaborative management system (co-management) for Dhamoirhat Sal forest involving local communities, Forest Department (FD) and other stakeholders***

A baseline survey was carried out to learn the community and their mode of dependency on the forest. Based on the survey results, twelve Forest Resource User groups (FUGs) had been formed. Afterwards a People's Forum (PF) had also been formed. The latter local institution (PF) represented diversified stakeholders like community elite people, representatives from local administration, Forest Department Officials etc.

The FUGs arranged regular monthly meetings. In the meeting the members deposit their monthly savings. They also discussed about their problems. The NGO officials also make them aware of the importance of the forest for their livelihood and the environment. The FUGs have demanded a room for their monthly meetings.

A People's forum (PF) for Dhamoirhat Sal Forest has been formed involving representative from local elites, elected representative, local administration and forest officials.

The people's forum helps the Community Based Organization (CBO) in planning, organizing, monitoring and accelerating their activities towards the project objectives on a sustainable basis.

They also monitor developmental activities related to Dhamoirhat Sal forest and its biodiversity conservation. Since its formation PF have conducted two meetings. There are provisions for sitting allowances for the PF members. It has been informed that due to shortage fund they could not arrange more meetings even though they wanted to. No co-management council and co-management committee has been formed at Dhamoirhat.

***Objective 2: Restoration of tree cover and biodiversity and sustainable management of the forest***

The project staffs conducted awareness raising programs to restore and conserve the remaining Sal forest. Regular awareness raising campaigns such as billboard establishment, observance of World Environment Day, forest campaign/rally in and around the forest, message throw by T-shirt, essay competition, seedling distribution among the project beneficiaries, folk song/gambhira, micking for conservation and restoration of biodiversity etc helped the community to learn about the importance of the forest for their livelihood and environment.

The participatory awareness raising programs established a sense of ownership of the forest among the community. Illicit felling by the outsiders, that was frequent in past, has been reduced. Most remarkably, members of the CBOs once prevented the members of the Border Guard of Bangladesh from illicit felling. People are still to some extent dependent on forest resources for fuel-wood and other household requirement. People were found collecting Sal leaves from forest floor. The indigenous community still hunts in the forest as hunting is their culture and tradition. But their behavior is changing and they aware of the negative impacts of hunting. It will take more time to change their habit.

Attitude of the Forest Department officials has been changed. Though PF meeting is irregular, NGO officials arrange regular meeting between FD and executive body of CBOs to build a rapport between two major stakeholders of the forest. Community people are working with FD towards biodiversity conservation.

Monthly meetings on the issues related to the objectives of the project were conducted on regular basis with the participation of selected members of the FUGs to reach the goal of the project and to make people aware about biodiversity conservation. Resolution of meetings were kept as evidence of the progress work.

**Objective 3: *Improvement of livelihood of the poor people living in and around the forests and their access to fuel wood through alternative means***

To date twelve FUGs have been formed in Dhamoirhat. They save money regularly and use this saving for generating money at community level. This practice establishes integrity among the community people. Besides, the project officials encouraged the FUG members about following alternative income generation options:

- Vegetable production (in homestead)
- Poultry rearing
- Goose & Duck rearing
- Goat & Sheep rearing
- Cow fattening
- Small business (tea stall, seed business, grocery)
- Fisheries
- Nursery business

The community people have been trained on above mentioned AIGA in order to improve their skills. They were also provided with critical input support (e.g. good seeds) to improve their livelihood. Out of the savings of the CBOs they bought six cows, six goats and twenty one sheep. They were also given fruit seedlings to improve their nutritional status. About 100 CBO members attended the exchange visit arranged by PMUK to observe different AIGAs with minimum investment. During the exchange visit they learnt about sustainable and alternative income generation with small asset.

**Objective 4: *Creation of opportunities for revenue generation from forest recreation or eco-tourism based activities benefiting local communities.***

There was an understanding that the Alta-Dighee Lake will be developed for ecotourism under the joint venture of forest department and local government. Afterwards PMUK would be involved in organizing and managing opportunities for revenue generation with the active involvement of the local community. This objective could not be attained as this was subject to the development of the lake and other facilities for tourism.

Table 2 summarizes the activities and outcome of the project.

**Table 2:** Summary of the activities and outcomes carried out by PMUK

<b><i>Establishment of a collaborative management system (co-management) for Dhamoirhat Sal forest involving local communities, Forest Department (FD) and other stakeholders.</i></b>	
<b>Activities</b>	<b>Outcome</b>
Establish local institutions like PF, CBOs.	One PF and Twelve CBOs have been formed.
Develop institutional capacity of CBOs	Supervision by project staff and PF
Facilitate regular monthly meeting of the CBOs and PF.	Regular communication has been established among key stakeholders for better functioning of the CBOs.
Identification of forest resource users.	Baseline survey conducted
<b><i>Restoration of tree cover and biodiversity and sustainable management of the forest</i></b>	
<b>Activities</b>	<b>Outcome</b>
Conduct baseline survey on socio-economic conditions and biodiversity	Dependency on the forest resources has been substantially reduced through different alternative income generation options and awareness raising campaigns
Mobilize forest resource users towards forest conservation through community meeting on biodiversity conservation	5 Sign board, 2 bill board, 500 leaflets and 1000 posters (500 first year + 500 in second year) has been published and distributed among the people as a part of awareness raising tools
Building awareness through billboard establishment, observance of different days (World Environment Day), forest campaign/rally in and around the forest, message throw by T-shirt, art/essay/debate competition, seedling distribution among the students, folk song/gambhira, micking for conservation and restoration of biodiversity	Project participants (members of CBOs) were able to protect Sal forest from destruction by the outsiders.
	Intense awareness raising programs have been arranged during peak season for forest resource collection.
	Forest destruction by the outsiders has been reduced
<b><i>Improvement of livelihood of the poor people living in and around the forests and their access to fuel wood through alternative means.</i></b>	
<b>Activities</b>	<b>Outcome</b>
Provide need based training for sustainable livelihood	Following alternative Income Generation Activities have been found by the project officials: Vegetable production (in homestead), Poultry rearing, Goose & Duck rearing, Goat & Sheep rearing, Cow fattening, Small business (tea stall, seed business, grocery), Fisheries and Nursery business
Identify, promote and support different income generation activities through participation of the beneficiaries	To date 19 training program and 1 exchange visit were carried out for sustainability of the project & financial benefits of the local communities
	6 cows, 6 goats, 21 sheep and seedlings of fruit and medicinal plants have been distributed to supplement the nutrition demand of the beneficiaries.
<b><i>Creation of opportunities for revenue generation from forest recreation or eco-tourism based activities benefiting local communities.</i></b>	
No initiatives have been undertaken under this objective.	

### **Impacts:**

Awareness raising activities showed remarkable positive results in this project area. It has been known that recently one CBO members have prevented influential illicit feelers from cutting a patch of Sal forest. Most of the respondents showed certain level of knowledge and positive attitude about the importance of their adjacent Sal forest from a number of aspects. CBO members are acting as extension agents for awareness creation of other member of the community.

Many of the local community have undertaken AIGA options by their own savings after motivation and training by the project. They are consuming more vegetables, fruits and animal nutrition than before. Exchange visit has helped them acquiring knowledge and skills specially on poultry, seasonal vegetables cultivation and shopping bag manufacturing. Training on domestic animal rearing (goat, cow and sheep) and poultry farming made them interested in these activities. Local community people are now much aware of the importance of the Sal forest and they are effectively trying to protect the forest from degradation. Many of them have taken up new income generation activities and have reduced their dependency on the forest significantly. If this situation continues the Sal forest can be regenerated and its biodiversity can be increased.

### **Sustainability potentials:**

Co-management approach has just been initiated to the community people and the FD officials at Dhamoirhat Sal forest under the project. To date twelve FUGs have been formed. The NGO officials facilitate them in arranging their monthly meeting. The Co-management bodies such as Council and Committee have not been formed. PF members do not meet regularly. If these local bodies are provided with technical and financial support for long term there is a potentiality for the sustainability of co-management approach at Dhamoirhat. As people are poor and traditionally depend of forest there should be more motivational program with AIGA in order to reduce their dependency on the forest on a sustainable basis.

These people are just being introduced with a new paradigm. If the project continues and incentives are provided on a long term basis, there is a good potential that the impacts that has already been observed during the project period would be sustainable.

### **Weakness/Areas that need to be strengthened:**

- Inadequate AIGA support for the local people.
- Inadequate awareness raising activities like school programs, rally on special days on environmental aspects.
- Insufficient exchange visit to provide advanced knowledge to the intended group.
- Lack of communication between FD and local community.

### **Recommendations:**

## PMUK

- ✓ Project should be extended for another two to three years for a significant reduction in the dependency on the forest and increase the awareness of the people towards forest resources.
- ✓ Revolving Loan Fund should be provided in order to have effective AIGA.
- ✓ A meeting room should be provided to each FUG.
- ✓ Number of exchange visit should be increased.
- ✓ If possible co-management council and committee should be formed.
- ✓ Forest officials should be more intimately involved in the project activities and they should be made more accountable.
- ✓ School programs (essay, debate and rally etc) should be increased.
- ✓ In the next phase of this project PMUK should be concentrated on eco-tourism. Donor and FD should also come forward to establish different eco-tourism facilities to generate revenue from the forest.