

Evaluation Report

Name of the project

Community based conservation of forest resources and enhancing rural livelihood in Rangamati, CHT

Implementing entity

Hill Flower



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Executive summary

Deforestation in the developing countries is regarded as a serious concern because of its resulting biodiversity loss, soil degradation and significant contribution to global climate change. Slowing down the deforestation and forest degradation and thereby restoring and conserving the forest ecosystems have been successfully achieved by the local community participation and management in many tropical countries. The Arannayk Foundation supported the project entitled “Community based conservation of forest resources and enhancing rural livelihood in Rangamati, CHT” implemented by the Hill Flower to restore and conserve the sub-tropical mixed evergreen forest ecosystem in Rangamati of the Chittagong Hill Tracts (CHT). The project has been running from June 2009 through May 2012. To measure the activities and impacts of the project, an evaluation activity was finished on December, 2011. The evaluation incorporated reviewing the project documents, annual progress reports and/or draft project completion report; visiting the project sites and discussing with the project staff, project participants, community leaders and other stakeholders; reviewing the achievement of the projects against the set objectives, both from the written report and field observations. To conserve natural forest resources, reduce poverty and improve livelihoods of the project area through the awareness and capacity building of the community, sustainable development and plantation of medicinal plants, non-timber forest products and timbers, the present project was undertaken with the following specific objectives; (a) Mass awareness creation on forest and biodiversity conservation; (b) Enhancement of livelihood of the households through alternative income generating activities; (c) Capacity building of the communities and resources organizations involved in forest conservation efforts; and (d) Restoration of endangered species. The impacts of the project show a good potential of sustainability of the capacity achieved by this project. However, the good health of the corresponding forests is dependent on some important factors, e.g., sustainability of the institutional support, activities altering the economic behavior of the participant, activities enforcing the conservation wisdom of the participants, etc. So, sustainability of restoring and conserving the forests depends on at least the above factors. It is difficult to conclude how long the institutional support will be needed to make the changes permanent. However, it is recommended to extend the project at least one more term. To make the restoration and conservation activities sustainable, the evaluator thinks that Reducing Emissions from Deforestation and forest Degradation, conserving and enhancing forest carbon stocks, and sustainable managing of forests (REDD+) activities will have a good potential in the project sites. To introduce this activity, baseline carbon measurement will be necessary in the corresponding forests. The present report is critical to the decision makers of the Arannayk Foundation whether to extend the project or not. However, it is a good to measure the community based nature conservation intervention.

Introduction

Deforestation in the developing countries is a serious concern because of its resulting biodiversity loss, soil degradation and significant contribution to global climate change (Ehrhardt-Martinez et al. 2002). It also hampers the livelihood and cultural integrity especially of the indigenous communities (Culas 2007). Community-based forest management is broadly considered as a principal strategy in nature conservation (Mannigel 2008). It becomes effective when appropriate incentives are offered to and roles are clearly defined to the participation (Sawhney et al. 2007).

Bangladesh has been experiencing severe deforestation and forest degradation over the last 3 to 4 decades. During the period 2000-2005, the annual rate of deforestation in Bangladesh was 0.3% (2000 ha) as stated by FAO (FAO 2007). In the meantime, many plants and animals have become extinct or endangered in Bangladesh (Chowdhury et al. 2009). A total of 40 inland mammals, 41 birds, 58 reptiles, 8 amphibians and 106 vascular plant species have reached at-risk status in varying magnitudes (IUCN 2000; Khan et al. 2001). The hilly areas of Chittagong, the Chittagong Hill Tracts, Cox's Bazar and the Sylhet Forest divisions consist of hill forests, which are subject to severe degradation due to overpopulation, shifting cultivation and extension of agriculture (Salam et al. 1999) coupled with encroachment by settlers, poverty and lack of awareness (Jashimuddin 2009). The forests in Rangamati are important biodiversity hotspot covering the tropical wet mixed forest ecosystem. The rich diversity in flora and fauna in Rangamati developed a unique forest ecosystem with numerous numbers of fountains and streams provided a nature dependent livelihood of the indigenous communities (Jashimuddin 2009). Before 3 to 4 decades, this area had a dense evergreen forest harboring innumerable biodiversity. The indigenous communities living inside the corresponding forests are Marma and Tonchongya.

The richness of floral diversity in the mountainous region creates the drinking water source through numerous fountains and streams (Paoli et al. 2010). The present decrease of the floral diversity in the forests of Rangamati made a serious threat to the indigenous communities for their water source along with other forest ecosystems (Jashimuddin 2009). The local anthropogenic causes to deforestation along with the global effect of warming have made this situation worse off for the indigenous communities in the Rangamati forests.

With the goal of restoring and conservation of the forest resources in the forests of Rangamati of Bangladesh, the Hill Flower supported by the Arannayk Foundation had an intervention project entitled "Community based conservation of forest resources and enhancing rural livelihood in Rangamati, CHT" during the period June 2009 to May 2012. To measure the activities and impacts of the project, an evaluation activity was finished on December, 2011. The evaluation incorporated reviewing the project documents, annual progress reports and/or draft project completion report; visiting the project sites and discussing with the project staff, project participants, community leaders and other stakeholders; reviewing the achievement of the projects against the set objectives, both from the written report and field observations. The present report is critical to the decision makers of the Arannayk Foundation whether to extend the project or not. Nationally and internationally, it is good to measure the community based nature conservation intervention.

Context and objective of the project

Forests in Rangamati under Chittagong Hill Tracts is an important biodiversity hotspot covering the tropical wet mixed forest ecosystem. The rich diversity in flora and fauna in the developed a unique forest ecosystem with numerous numbers of fountains and streams

provided a nature dependent livelihood of the indigenous communities (Jashimuddin 2009). Before 3 to 4 decades, this area had a dense evergreen forest harboring innumerable biodiversity. The indigenous communities living inside this forest are Marma and Tonchongya. The richness of floral diversity in the mountainous region creates the drinking water source through numerous fountains and streams (Laurance 2007). The present decrease of the floral diversity in the Rangamati forests made a serious threat to the indigenous communities for their water source along with other forest ecosystems (Jashimuddin 2009). The local anthropogenic causes to deforestation along with the global effect of warming have made this situation worse off. To conserve natural forest resources, reduce poverty and improve livelihoods of the project area through the awareness and capacity building of the community, sustainable development and plantation of medicinal plants, non-timber forest products and timbers, the present project was undertaken with the following specific objectives;

- (a) Mass awareness creation on forest and biodiversity conservation;
- (b) Enhancement of livelihood of the households through alternative income generating activities; and
- (c) Capacity building of the communities and resources organizations involved in forest conservation efforts.
- (d) Restoration of endangered species.

Project activities and outcomes

From June 2009, the Hill flower, a non governmental development agency in Rangamati has been implementing this project at 5 no-Wagga union, Sapchari of Kaptai under the district of Rangamati. Stipulation and the present context of the most deteriorating environmental hazards and inevitability of community assessment led the Hill Flower to undertake this project (HF 2011). The topography and the environmental stance is suitable for conservation of forest and natural resources (HF 2011). The indigenous inhabitants in the project area are dependent on the cultivation of the hilly slopes and natural resources. The bio-diversity of the region is at stake due to the imbalance in the environment (HF 2011). Due to cultivation of hilly slopes, a large area comes under cultivation which erases the existing nature (HF 2011). Continuation of this process has brought the area to the edge of disastrous situation (HF 2011). The table 1 shows the objective based activities and the achievements;

Table 1: Objective based activities and achievement of the project implemented by the Hill Flower, Rangamati supported by the Arannayk Foundation.

Objectives	Activities	Achievement / Outcomes
Mass awareness creation on forest and biodiversity Conservation	1.1 Community meeting	1.1 210 times meeting with community peoples have been done.
	1.2 Arrange Slogan Competition	1.2 Have been arranged a slogan competition in December 2009 about conservation of Forest and Bio-diversity.
	1.3 Inception Workshop	1.3 On 12 January 2010 Inception Workshop has been arranged. Mr. Biswajit Bhattachariya,ADC Rangamati was chief guest of the workshop and 64 participated the workshop
	1.4 Publish Posters, sign board and Bill Board	
	1.5 Awareness meeting	1.4 Published 3000 poster in 2009 and On August 2010, 4000

Objectives	Activities	Achievement / Outcomes
	With Students	total 7000 posters distributed various institutions, 02 sign boards and 02 digital bill boards.
	1.6 Meting with Monks	1.5 03 tomes meting with students have been organized. on 19/11/2009,09/03/2011 and 10/03/2011 and participated 103,65 and 90 students were attend respectively.
	1.7 Meting with Elites	
	1.8 Workshop to Other Upazila	1.6 03 times meting with monks have been organized on 02/12/2009,22/03/2010 and 18/12/2010 and 76 monks and shramon were present in these meeting.
	1.9 Exchange Visit To Khagrachari (BARI)	1.7 02 times on 24/12/2009 and 26/09/201 have been organized meting with elites and 60 participants were present.
	2.0 Observe WED	1.8 Workshop organized with Local administration elites and Ngo workers at Bilaichori Upazila creating awareness on Conservation of Forest and 40 participants have been participated in the workshop. 1.9 02 times have been visited to BARI and Anando project at Dighinala and 57 beneficiaries and staffs visited the places. 2.0 02 times on 5th June 2010 and 2011 on World Environmental day have been organized and 58 and 61 participated these rallies and discussion meetings. 2.1 Publish 250 calendars in December 2011, with four color giving the message of conservation of forests.
Enhancement of livelihood of the households through alternative income generating activities	1.1 Sapling Distribution	1.1 03 times on 14/08/2009,28/06/2010 and 10/08/2011 various kinds of mix fruits and indigenous saplings have been distributed among the beneficiaries and held distribution ceremony on August 14,2009 Sri Jyotirindra Bodipriyo Larma,Chairman CHTRC was present as a chief guest .
	1.2 Mushroom and Beekeeping Training	1.2 02 days long Mushroom and bee-keeping training have been organized and 100 participants were attend the training.
	1.3 Distribution of Revolving Fund	1.3 02 times Revolving Fund distribution ceromony have been organized on 12/01/201,while Mr.Bishwajit Chakraborty ADC,rangamati and 20/03/2010 while Mr.Aungsupru chowdury,Chairman of Kaptai Upazila were present as a chief guest. Total 8 lac taka cheque have been given to the 4 samitees.
	1.4 Open Bank Account of the <i>Samitees</i>	1.4 04 accounts have been opened in kaptai Krishi Bank in the name of 4 samitees 1 .Sapchari Moin Para Samite, A/C No-4937 2.Sapchari Para Samitee, A/C No-4939 3.Tripurachari Para Samitee,A/C No-4936 4. Hatimara & Tamba Para Samitee A/C No-4938
	1.5 Grafting Training	1.5 04 beneficiaries participated in the two days grafting training from 20 to 21 September 2010 organized by BIRAM in Khagrachari.
	1.6 Nursery training	1.6 04 Beneficiaries participated on 28-29 September 2010 two days long training organized by Hill Flower.
	1.7 Training On Agriculture	

Objectives	Activities	Achievement / Outcomes
		1.7 8-9 December 2010 Two days Training on Agriculture have been organized for beneficiaries. 71 participants were present in the training. ❖ 03 Nursery 02 shops, 1 pig farm and 01 husking machine have been established by beneficiaries.
Capacity building of the communities and resources organizations involved in forest conservation efforts	1.1 Coordination Meeting	1.1 24 times monthly staff coordination meeting have been done.
	1.2 Technical Training to the Beneficiaries on Forest Conservation	1.2 On 05 march 2010 Technical training have been organized and
	1.3 Training On Financial Training	1.3 On 13 March 2010 Accounts training have been conducted by Mr.Nantu Marma,Account and Admin Officer ,BLAST
	1.4 Training On Forest Conservation (Staffs)	1.4 On 19 March 2010 have been given basic training on Forest and Forest Conservation to staffs. Prof. Jashimuddin Ahmad ,Forestry institute, Chittagong University facilitated the training.
	1.5 M&E Training (Staffs)	1.5 on 11,12 June 2010 two days long M&E training have been organized at Hill Flower office
	1.6 Facilitation Skill Training	1.6 02 staffs have been participated the training which is organized by Proshika by the financial support of Arannyak Foundation.
	1.7Participatory Rural Appraisal Training	1.7 01 staff have been participated the training which is organized by Proshika by the financial support of Arannyak Foundation.
	1.8Organizational Development & Management Training (Staffs)	1.8 02 staffs have been participated the training which is organized by Proshika by the financial support of Arannyak Foundation.
	1.9Value Chain Analysis	1.9 01 staff have been participated the training which is organized by Proshika by the financial support of Arannyak Foundation.
Restoration of endangered species	1.1 Plantation of Endangered Species	Total 11295 seedlings mix fruits and endangered have been distributed to the beneficiaries and planted in the project area.

Impacts of the project

The impacts of the projects are outlined below for all the three objectives;

1. At least two-thirds people of the entire Wagga Union have become aware and active in conserving the landscape and forest resources of the project area
2. A forest conservation committee formed
3. Stone removal from the creeks in the project area is reduced 100%.
4. Felling of endangered native trees in the project area has been reduced by 90%
5. Incidence of trapping/hunting of wild animals in the local forests has been reduced by 90%
6. Annual income of the 105 direct participants (households) of the project increases by at least 20% directly through project interventions

7. Production of fruits, vegetables and other horticultural crops in the homesteads of the project participants increase by at least 25% aiding environmental conservation and sustainable development
8. Community people kept them away to cut the Jhum surrounding the village common forest
9. Natural regeneration of the corresponding forest is increased
10. Coverage of the corresponding forest is increased
11. Baseline survey report under this project acted as a guideline to conduct restoration and income generation activities
12. Now the participants are more interested to conserve the community forest and other best practices.
13. Endangered tree species has been successfully planted near to the homesteads.
14. The participants do not cut the trees from the forests except some collection of fuelwood for their household use.
15. The availability of wildlife in the forests has been enriched after the introduction of the project.

Sustainability potentials

The impacts show a good potential of sustainability of the capacity achieved by this project. However, the good health of the corresponding village common forests is dependent on some important factors, e.g., sustainability of the institutional support, activities altering the economic behavior of the participant, activities enforcing the conservation wisdom of the participants, etc. So, sustainability of restoring and conserving the forests depends on at least the above factors.

Weakness/Areas that need to be strengthened

The participants opined that they needed more supports to find out the alternative livelihoods. More training/workshop is needed to uphold the activities. The revolving funds provided to the committee were deemed to be insufficient by the participants. So, more funds should be given to the committees for their alternative livelihood activities.

Recommendations

The reports and corresponding field visits show that the project has a significant effect on restoring and conserving the forests and their surroundings. The impacts show a good potential of sustainability of the capacity achieved by this project. However, the good health of the corresponding village common forests is dependent on some important factors, e.g., sustainability of the institutional support, activities altering the economic behavior of the participant, activities enforcing the conservation wisdom of the participants, etc. So, sustainability of restoring and conserving the forests depends on at least the above factors. It is difficult to conclude how long the institutional support will be needed to make the changes permanent. However, it is recommended to extend the project at least one more term. To make the restoration and conservation activities sustainable, the evaluator thinks that Reducing Emissions from Deforestation and forest Degradation, conserving and enhancing forest carbon stocks, and sustainable managing of forests (REDD+) activities will have a good potential in the project sites. To introduce this activity, baseline carbon measurement will be necessary in the corresponding forests.

Global climate change is a serious concern now-a-days incorporating the most challenging issues facing humanity. To mitigate the global climate change, it is expected that

REDD+ will be the central forestry activities in the tropical developing countries after 2012 (Skutsch & Trines 2008).

The financial incentives for REDD+ in the pilot projects established in tropical and sub-tropical areas in Asia, Africa and South America have been found to alter the drivers of land use changes by reducing opportunity costs of retaining forest cover, and are often promoted as multipartite solutions that not only generate profits and reduce carbon emissions, but also provide benefits for human development and biodiversity (Carlson & Curran 2009). India and Costa Rica have already had success with programs to restore their forests and they feel they should receive compensation for these early areas assigned to logging concession and is keen for REDD+ to support sustainable forest management (UNFCCC 2007). Stickler et al. (2009) found that nations in the Amazon region can potentially participate in REDD+ by slowing clear-cutting of mature tropical forests, slowing or decreasing the impact of selective logging, promoting forest regeneration and restoration, and expanding afforestation and reforestation. As ecosystem services derived from REDD+ projects will have a global interest, it could access a large pool of global stakeholders willing to pay to maintain carbon in forests. Singh (2008) confirms that appropriately designed community-based forest management under REDD+ can provide a means to sustain and strengthened community livelihoods and at the same time avoid deforestation, restore forest cover and density, provide carbon mitigation and create rural assets. However, before adopting REDD+ as an effective deforestation-reduction mechanism, decision on the nature of carbon buyers and sellers, financing mode, compensation scheme, and type of land use to be targeted should be made (Oestreicher et al. 2009). However, good governance and political endeavors are also important to make this program successful (Melick 2010).

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