

Evaluation Report

Name of the project

**Community based conservation of village common forest in Rowangchari,
Bandarban**

Implementing entity

Tahzingdong



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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 village common forest in Rowangchari, Bandarban” implemented by the Tahzingdong to restore and conserve the sub-tropical mixed evergreen forest ecosystem in Rowangchari of Bandarban district. 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 restore the degraded forest resources and conserve the forest ecosystems, the present project was undertaken with the following specific objectives; (a) Protection and preservation of community based forest resources; (b) Sustainable management and institutional capacity building of forest based communities; (c) Enhancement of livelihood security through alternative income generating activities; and (d) Protection of watershed and awareness campaign of biodiversity conservation. 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 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 VCF 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 VCFs. 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 hills in the Bandarban district are important biodiversity hotspot covering the tropical wet mixed forest ecosystem. The rich diversity in flora and fauna in Bandarban 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 Rowangchari forest are Marma and Bawm.

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 Rowangchari 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 for the indigenous communities in the Rowangchari forests.

With the goal of restoring and conservation of the forest resources in the Rowangchari forests of Bandarban district of Bangladesh, the Tahzingdong supported by the Arannayk Foundation had an intervention project entitled “**Community based conservation of village common forest in Rowangchari, Bandarban**” 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 Rowangchari of Bandarban district 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 (HF 2011; 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 Bawm. 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 Rowangchari 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 restore the degraded forest resources and conserve the forest ecosystems, the present project was undertaken with the following specific objectives;

- (a) To protect and preserve community based forest resources;
- (b) To achieve sustainable management and institutional capacity building of forest based communities;
- (c) To enhance livelihood security through alternative income generating activities; and
- (d) To protect watershed and awareness campaign of biodiversity conservation.

Project activities and outcomes

The experience from the previously implemented project entitled “Consolidating community rights over natural resources for conservation of environment and sustainable development” helped the Tahzingdong to conceptualize and design the present project (Tahzingdong 2011). The village Karbaries and Mouza headman led different linguistic groups manage the several community based forest/village common forest (VCF) called by different names in different areas. The community based forest/village common forest in the Chittagong hill tracts have been gradually managed through semi structure or unstructured methods (Tahzingdong 2011). Women and men are both involved in the conservation of the community forest/village common forest. However, women could not play a vital role in major decision making processes (Tahzingdong 2011). In the last few decades, VCF’s are decreasing and decreased in size and number and have lost much of their species diversity. The project area covers three villages in Rowangchari sadar union namely Tulachari, Rowangchari sadar and Ronin para. The project started from June 2009 and run upto May 2012.

The project outcome based on the set objectives is given below as in the Table 1.

Table 1: Output based activities of the project implemented by the Tahzingdong, Bandarban supported by the Arannayk Foundation.

Objective	Activities	Quantity	Outputs
Protection and preservation of the community based forest resources	1. Formation of the forest resource based management committee	03	1. Community manage their monthly meeting 2. Meeting minutes noted on their resolution 3. Committee developed their constitution
	2. Application for land registration for community ownership of VCF's	03	1. Community applied for registration to hill district council including recommended letter from headman.
	3. Meeting with community forest management committee	12	1. Community shared their experience about VCF 2. The managed plan for well conserving of natural resources
	4. Formulation of forest management policy	3	Three VCF committee made their policy for better conservation of their VCF
Improvement of livelihood status in the respective community	1. Revolving fund support to agro forestry group, small-scale business and others	Total 2, 80,000/= BDT given to the 2 committees.	1. Total 22 families received fund for Ginger, small scale business, intensive agriculture 2. Community ensured 10/=BDT as monthly deposit to increase their fund for strengthening VCF committee
	1. Seedling distributed to each committee.	6000 no# seedlings (1 st) 3,000 no# seedling (2 nd)	1. Community planted all seedlings at the VCF 2. Committee ensured there has no excuse or apologies if anyone cut trees without permission
Protection of watershed and its catchments area	1. GFS ¹ installation for usable water supply towards forest conservation and sustainable watershed management.	01	1. Community takes care regularly and they realized GFS installation will supply their usable water without fail 2. Increased conserving sense in the Community that there will be no water resource without properly guidance

¹ GFS refers to Gravity Flow System

Objective	Activities	Quantity	Outputs
Building up awareness on community forest and environmental security and biodiversity	Celebration of World environment day	02	towards VCF 1. Introduced mass people participation would be needed for better conservation of forest resource 2. Community recognized that why and how they could manage their forests and it resources for future generation

The project changed the forest management of the respective VCF as shown in the Table 2.

Table 2. The changes of VCF management and the livelihoods of the participants by the project implemented by the Tahzingdong supported by the Arannayk Foundation.

Objectives	Inputs	Outputs	Impact	Awareness	Achievement
Conserving VCF and its biodiversity	Preparation of management plan for VCF committee	There is no final decision of management plan, only committee encouraged themselves how to put boundaries line and legal ownership.	Committee put decision on their meeting resolution to establish boundary pillar in the next quarter.	Community didn't established jhum cultivation at the VCF within the two years	Within the two years mostly Bamboo and others non-timber species was grown up at the VCF
Alternative income generating activities	Total 8,30,000 tk have been given to the three committee	community established fruits plantation to reduce their Jhum practice	Jhum covered area was fill up with fruits which clean up before 2 years	Community willingly receives the ideology to establish mix fruit garden at their jhum field.	Community increased their source of income

As the restoration activities, the project supplied the endangered tree species to be planted which were recommended by the baseline survey (Jashimuddin 2009). Among the species, Civit 35%, Dharmara 53%, Jaganna gula 43%, Gorjon 40%, Koroi 38% and Telsur 35% were successfully planted. The survival percentage was more than 80%. Community

planted a great number of Gorjon seedlings at VCF areas within the last two years. Among the seedlings, Gorjon is the rare species in the given area.

The selected communities developed their plantations besides VCF boundaries. At the beginning of the project it was fully covered by continuously jhum affected areas. The project altered the participants' sense to support the project strategies and working for better conservation of their VCF. The project activities changed the participants' behaviour to establish mixed tree plantation in the jhum land rather than shifting cultivation.

Impacts of the project

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

1. Community people kept them away to cut the Jhum surrounding the village common forest.
2. Natural regeneration of the VCF is increased.
3. Forest cover of the VCF is increased.
4. Baseline survey report under this project acted as a guideline to conduct restoration and income generation activities.
5. VCF committee maintains monthly meeting resolution document, cash and ledger book.
6. The committee formed by the project is trying to register the VCFs for their communities.
7. The VCF committee created a mixed fruit garden outside of the VCF and managing it accordingly.
8. Now they are more interested to conserve the community forest and other best practices.
9. Endangered tree species has been successfully planted beside the VCF.
10. The participants do not cut trees from the VCF except some collection of fuelwood for their household use.
11. The availability of wildlife in the VCF has been increased after the introduction of the project.
12. The participants were interested to introduce agroforestry near to their homesteads as the alternative livelihoods activities. The project was successful to increase their monthly income.

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 VCF depends on at least the above factors. The project official reported (Tahzingdong 2011) the challenges of their activities which can be encapsulated as below;

- (a) The participants are mostly interested to cultivate tobacco for their economical security. At the same time tobacco was the essential crops for everyone to increase money and flexible marketing accessibility.
- (b) The participants were not interested to make vegetable garden at their homestead area except collecting fuel wood and day labor activities.
- (c) The corresponding communities have its internal interrelation and confliction. So, it was a major problem to create an enabling environment among the communities.
- (d) The respective ethnic community has the traditional habit of hunting, fishing and gathering forest resources. So it is a challenging issues how to manage them to keep forest resources with these three things.

The long distance of the VCF from the homestead of the project participants pose a thread to permanently make an ecosystem change.

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 VCF committee were deemed to be insufficient by the participants. So, more funds should be given to the VCF committees for their alternative livelihood activities. The uncertainty of the land ownership of the VCF made the participant a little bit worried about the sustainability of their activities. So, supports to them to register their VCF lands are necessary. However, the VCF land proprietary should be within the regime of the common property regime. It should be legally defined as a communal resource. But the roles and regulations of this common property resource should be monitored by the government authority.

Recommendations

The reports and corresponding field visits show that the project has a significant effect on restoring and conserving the village common 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 VCF 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 VCFs.

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 Amazons 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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