Title: "Fuel wood, Alternative Energy and Forest User Groups in Chunati Wildlife Sanctuary"

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Introduction

In the 1970s, this forest and the surrounding area was an important regrouping area of the Liberation War fighters. The Sanctuary was formally established under the Wildlife Act in 1986. Through the mid-1980s, the Sanctuary was covered by dense forest on Garjan and other hardwood species. Demand for wood for boat building and other commercial enterprises contributed to a rapid loss of forest in the late 1980s. In 2004, the Sanctuary was selected as one of the five pilot sites for co-management under the Forest Department's Nishorgo Program. This Sanctuary is a tropical semi-evergreen forest in Bangladesh situated at about 70 km south of Chittagong city and the west side of Chittagong-Cox's Bazar Highway. The GPS location for the sanctuary is 21° 40'N and 92°07'E. Administratively this sanctuary is divided into two Forest Ranges. One is Jaldi and another is Chunati. Under these two ranges, there are 7 Mouzas, divided into 15 villages and further divided into 70% settlements (locally called para). Of the paras, about 48% is located inside and at the edge of the forest and the rest are located outside but adjacent and nearby the forest. In the Chunati Range, there are about 7810 HHs and total populations are of approximately 50000. There are approximately 1200 plant species, which include 45 species of trees and rest are herbs and shrubs, which are now present. A total of 178 species wildlife species found in the sanctuary which include 6 amphibians, 8 reptiles, 137 birds and 27 mammals (NACOM 2004).

Research Objectives

The main objective of this study is to analyze Forest User Group Profile, need assessment of the forest user groups and also create an alternative income generation opportunities for the key forest user groups in the same protected area. The specific objectives of the study are considered in the following:

- 1 To study Fuel Wood, Alternative Energy and the forest user group profiles, which are mainly depend on existing natural resources for their livelihood.
- **2** To conduct a livelihoods assessment of forest user group members and their need assessment for bringing them into a sustainable livelihood.
- **3** To study the role of co-management council as well as co-management committee for changing the overall life style of the FUG.
- **4** To study the alternative energy for forest user groups improving their livelihood.

Research Hypothesis

Investigation of Forest User Groups profile about their need and alternative energy is the main aim of this said project. If we categories the FUG who mainly depend on forest resources by their indigenous knowledge, skills and capabilities and then improve their skill, knowledge by using technology transfer, credit facilities for improve chullas, nurseries etc. then poverty will definitely be reduced and then by their awareness or self motivational process protected area could be managed properly. For their livelihood, they would use protected area without any kind of massive destruction of forest for fuel wood collection. FD should permit them for farm forestry; strengthen home base gardens and also alternative strategies for energy supply.

Justification of selecting the study matter

For the justification of selecting the study matter there need some strategies which is being implied by the Nishorgo Support Project like for the study period or implementation period of the project, participatory forest management activities should be strengthen, village nurseries should be patronized by FD by giving local indigenous technology and necessary inputs. Fuel wood and timber yielding fast growing species including bamboo should be encouraged to plant more by giving them required seeds, seedlings, technologies etc. FD should assure Forest villagers that they would reap the benefit it they plant up trees in their homestead around the sanctuary. Peoples should be motivated to adapt alternative energy supply and then it would be possible to reduce the pressure on prospective Protected Area.

Research Questions

- 1. Describe and evaluate how Forest User Groups (FUG) work, their rules and regulation, membership and also institutional profile that are mostly depend on existing natural resource in PA?
- 2. Describe and evaluate how co-management committee works in the Sanctuary and what is the important role of that council & committee for improving their life style?
- 3. What is the opinion of Forest User Group about local wood fuel production flow, utilization, supply & demand of fuel wood in the PA?
- 4. What alternative energy such as improved stoves, nurseries etc. do the forest user groups have now and in future?

Methodology

The proposed study will be carried comprises two basic popular methods which are stated below:

First one is primary data collection by questionnaire survey for comanagement council, committees as well as patrolling groups. Mainly question will ask to them about their role in perspective of protective area management. Then Forest User Group members (House Hold Survey) will survey through semi structured questionnaire method. In this method key informants interview and also PRA tools to be used. The focus group of this study are mainly forest user groups at Chunati Range only and they are comprises 39 existing FUG in the present scenario. Approximately there are 19 members in each group. Out of 39 FUG 15% will consider for this study on the basis of simple random (Random table application) sampling method, i.e. 06 key FUG will take into account. Out of 06 key forest user groups 35% (i.e. 42 households) will cover the questionnaire survey applying stratified random sampling on the basis of their occupational level. For comanagement council & committee guestionnaire method will be applied for very few members because of time limit and also availability of the key personnel. More emphasis will be given about their knowledge, their view and also experiences shared with the existing Nishorgo Support project. Village level govt. officials for historical data records, Private Wood fuel producers, Wood fuel traders and consumers will be interviewed.

Another is Secondary data collection from different sources like Nishorgo Support project work plans, local level forest working plans, Districts Gazettes, Statistical Year book etc would be taken for the purpose of this study.

Lastly data tabulation and analysis would be done in both manual and computer software base. Statistical package like SPSS (Statistical package for Social Science) could be used for the betterment of findings in the proposed study. Finally report writing will be done reflecting the outcome of the study work.

References

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Tentative Timeline

- ® Secondary data collection would be taken place for near about 7 days.
- R Key informants interview would be considered and this be done within 10 days.

- Preliminary Sample survey will be carried for 20 days, if need any further modification of questionnaire, then at this stage it would be done through the supervision of Guide.
- In Final Household Survey works would be done for 90 days (The successive days).

Month wise Study Performance is shown in the graphical representation, which is as follows:

Study Performance		Time Frame (Months)					
SL#	Activities	Jan	Feb	March	April	May	June
1	Secondary data collection						
2	Key informants interview						
3	Preliminary Sample survey						
4	Primary Data Collection						
5	Data Analysis & Reporting						