

## **Project Update: November 2011**

### **Background of the work**

Forestry is an important sector in Bangladesh's economy. Forest lands make up almost 18% of the total lands in Bangladesh where natural forest accounts for about 31%. REDD+ is now a central topic of research and discussion in the arena of climate change mitigation and forest conservation. The financial incentives for REDD+ in many pilot projects established in several countries have been found to alter drivers of land use changes by reducing opportunity costs of retaining forest cover, and as multipartite solutions that not only generate profit and reduce carbon emissions, but also provide benefits for human development and biodiversity. The importance of Traditional Ecological Knowledge (TEK), usufructs of the forest dependent peoples, has been emphasized for the successful implementation of REDD+. Bangladesh had no pilot project on REDD+. Tropical semi-evergreen forests in the Chittagong Hill Tracts (CHTs) of Bangladesh are severely deforested and degraded. REDD+ can potentially retard deforestation and degradation. So, it concerns a research question what is TEK regarding natural forests of the local peoples living inside the forests which can be incorporated while planning for the REDD+ projects in the CHTs of Bangladesh. The present study aims at answering this research question.

### **General objectives of the study**

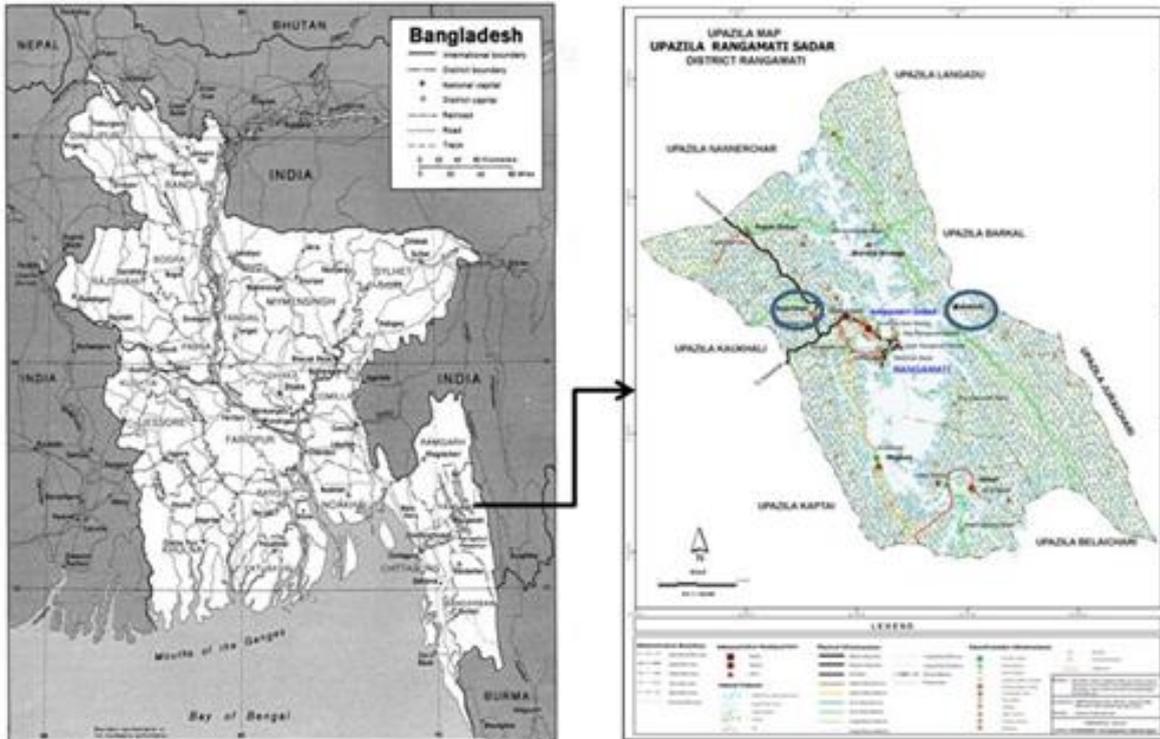
The general objective of this research project is to find out the TEK of the forest dependent peoples living inside the tropical semi-evergreen forests in CHTs of Bangladesh.

### **Specific objectives of the study**

- Shorting out TEK of the forest dependent peoples regarding biodiversity conservation
- Identification of TEK for vulnerability reduction in their livelihood
- Shorting out the alternative livelihood practices which can be used while implementing REDD+
- Identification of tradeoffs between forest biodiversity use and expected carbon benefits of the peoples

### **Study area and method of sampling**

The Chakma ethnic community living inside the forests is the dominant tribal group in Bangladesh. TEK of a tribal community, especially Chakma living inside the tropical semi-evergreen forests was sampled purposively as a case study in the Rangamati Sadar Upazila (Local government unit under a district) at Rangamati District in Bangladesh (Figure 1). A stratified random sampling technique was applied to locate the forest dependent households in two strata. Two Unions were selected randomly from the Upazilla based on two strata (severely deforested and degraded). The name of the selected two unions are Balukhali and Sapchhari. From each union, 3 villages were selected randomly making a total of 6 villages for the study. The name of the villages are Headmanpara, Modhyapara, Badhipur, Shapchoripara, Shapchorimodhopara and Harekkhang. From each selected village, 15 households were selected randomly. It made a total of 90 households as the ultimate sampling units.



**Figure1. The selected Unions, Balukhali and Sapchari, are shown in the map of Rangamati Sadar Upazila of Rangmati District, Bangladesh**

### **Description of present status**

A reconnaissance survey in Rangamati Sadar Upazila was performed on July 2011 to obtain an overview of the forests and the Chakma community in the CHTs of Bangladesh. And then, a planning meeting was organized with the participation of all data investigators and prominent naturalists. For better understanding and pin-pointed methodology, the planning meeting appeared as a stakeholders' consultation. In this consultation, we had an academic discussion with Professor M. Kalimuddin Bhuiyan, Professor Dr. Kamal Hossain and Dr. Jarin Akhter of Institute of Forestry and Environmental Sciences, University of Chittagong; and Professor S.M. Monirul Hasan of the Department of Sociology of University of Chittagong. In our meeting, Dr. Shalina Akther, a freelancer consultant in tribal usufructs and society mobilization dynamics, was also present. Mr. Sheeladitya Chakma, Mr. Pipir Chakma and Ms. Dipannita Chakma also were present in our planning meeting as the nearest stakeholder of the Chakma community in the CHTs. We had a very effective adjustment in our planning of research after this meeting. We adjusted the pre-made semi-structure questionnaire and re-oriented our approach of data collection after this meeting. Finally, at this date, the data collection by semi-structured questionnaire has been completed for 90 forest dependent households.

Our field observation and ocular estimation of the completed questionnaires show that the most of the respondents are illiterate; and agriculture (shifting cultivation) is their main occupation. Study also finds that they are highly dependent on forest products for the sources of cooking energy and cultural practices. We have found a good clue how we can alter their behaviour for their alternative livelihoods, if REDD+ are implemented. Introducing improved cooking stoves and alternative fuels to firewood, can shift them from accessing natural forests. Our survey primarily shows that prohibiting the forest peoples from using the medicinal plants and cultural uses of the products will be difficult. In our final report, we will be able to show how much REDD+ program should give up from prohibiting the forest peoples of forest use.

Local elites, community leaders and other key persons provided us significant opinion on the forest conservation and REDD+ implementation. We were partially successful to make a network of volunteers such as students, environmentalists who contributed with data collection and monitoring of the forest dependent peoples' perception and their traditional ecological knowledge.

**Ongoing works**

The data are being inputted into the SPSS statistical program. A local awareness program is being planned with an aim at focusing the potentialities of REDD+.