

**Research Proposal  
For  
Nishorgo Support Project (NSP) Fellowship Grant, 2007**

**Research Theme: Co-Management and Protected Areas**

**Research Title: Participation of Local Community in the Co-Management Activities of Nishorgo Support Project at Chunati Wildlife Sanctuary in Bangladesh.**

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### **Introduction**

Protected areas (mostly forests) are the last remaining bastions of Bangladesh's vital natural resource systems – that fuel the continuous ecological, economic and social development. Bangladesh's declared protected areas cover 0.5% of the country's surface area, compared to 5.1% for neighboring India, 9.6% for Sri Lanka and 12.7% for Thailand (FD, 2006). On a per capita basis, Bangladesh has the **lowest-level** of available protected areas and intact forest in the world.

Awareness of the importance of protected areas in preserving the nation's ecological integrity - on which its sustainable development depends - has grown with rapid modernization. Increasingly, both the Bangladesh Government and the Bangladeshi people have recognized that the country's protected area estate is a vital asset, both for conserving natural systems and species, and for sustaining national economic development potential and the livelihoods of millions of rural people.

People have realized that there can be no agricultural development without water – the supply of which is guaranteed by forests. This directly affects rural farmers who have been living in and around natural ecosystems. Urban citizens, living a stressful modern life, instinctively desire the mental relief provided by nature, as represented by forests. Forests are attaining a more symbolic meaning to these people. Thus, the “conserve nature (this mostly means ‘Forests’)” slogan voiced by environmental NGOs or journalists has been winning the sympathy of citizens. Both rural and urban people have started to feel that there is little sense in environmental protection, biodiversity conservation and public welfare without protecting forests. As a result, the Forest Department (FD) of Bangladesh has responded with the creation of a new protected areas management program called “**Nishorgo**”.

The Nishorgo Program is a comprehensive effort to improve the management of the country's protected areas of all kinds. **Protected Areas** as the term is used by the FD include such areas as Wildlife Sanctuaries, Game Reserves, National Parks and even the more recently designated Safari Parks and Eco-Parks. At the heart of Nishorgo is a focus on Co-Management or Collaborative Management. **Co-Management or Collaborative Management** is defined as “a situation in which two or more social actors negotiate, define and guarantee amongst themselves a fair sharing of the management functions, entitlements and responsibilities for a given territory, area or set of natural resources” (FD, 2006 cited in Borrini-Feyerbund, IUCN: 2000).

**Participation** of the people involved in development programs is often seen as a way to make these development programs more successful, especially for solving problems of poor people (**Ban and Hawkins, 1996**). The term **participation** is used in many ways, meaning different things to different people and agencies. Most commonly, **participation** refers to people's voluntary contributions to projects in the form of labor, cash or kind. According to Cohen and Uphoff (**1980**), **participation** means co-determination and power sharing throughout the Regional Rural Development (RRD) program cycle. More specifically, it relates participation in problem identification and ranking, decision-making, planning, implementation including mobilization of resources, benefit-sharing and monitoring and evaluation of RRD program. From the United Nations, popular (people) **participation** refers to three distinct but closely related aspects of the development process: **1) mass sharing of the benefits of development; 2) mass contribution to development; and 3) mass involvement in the decision-making process for development**. Popular participation is seen both as a goal of development involving equitable distribution of national income and equality of opportunity, and as a means for development effort or as a broad-based popular involvement in the decision-making process. The relationship is a two-way venture: people contributing to the developmental effort increases the benefits for them, and this then acts as an incentive for increased popular contribution to development.

For the last 20-25 years in Bangladesh, community forestry has evolved from an emphasis on improving the subsistence levels and reforestation activities, to looking at viable ways communities can generate income from the management and utilization of forest resources. It is now widely accepted that if local communities are involved in making decisions regarding resource management and derive benefits from conservation activities, they are more active to conserve forest resources. A range of collaborative activities from around the South and Southeast Asian regions including Bangladesh have demonstrated that participation of local communities in the management of forest resources assists in conservation as well as promotes rural development (**Bornemeier et al. 1997**). The “**Co-Management of Protected areas**” in Bangladesh as implemented by Nishorgo is one such emerging activity which can be cited as a panacea for incorporating the principles of sustainable development in protected area management.

## **Research Questions**

Protected areas are refuges of tranquility and peace, aside from the lack of local participation, yet they are also places where conflict occurs. In a world in which the bio-physical environment and socio-cultural systems are changing rapidly, conflicts involving protected areas are inevitable (**Lewis, 1996**). Conflict stems from the desire to both preserve natural settings and to allow people access to them (**Ceballos-Lascurain, 1996**).

With the potential of “Co-management” this research, therefore, tried to answer the following questions:

1. **What is happening at present** in the political, socio-cultural and environmental aspects of the community at Chunati Wildlife Sanctuary (**CWS**) in terms of “Co-management under NSP”?
2. **What is the type of people participation** in the co-management activities under NSP at CWS?
3. **How are conflicts and cooperation managed/resolved** in and around the communities of CWS?
4. **How do people perceive the co-management activities** under NSP as a contributing factor to the sustainable community development at CWS?
5. **What are the problems and obstacles of the local community** at CWS when participating in the co-management activities under NSP?

## Research Objectives

The objectives of the research are:

1. To explain the current situation of co-management in terms of political and socio-cultural environments of local community at CWS.
2. To determine the type of local community participation in CWS.
3. To analyze the type and level of conflict and cooperation among local people of CWS in the co-management activities and how they manage it.
4. To explain the perception of people regarding co-management activities and their contribution to sustainable development of local community at CWS.
5. To identify problems and obstacles of local community in CWS in their participation in co-management activities under NSP.

## Definition of Terms

**Chunati Wildlife Sanctuary (CWS)** – refers to the area (site) or village where the research will conduct, located within Banskhali and Lohagara Upzilas of Chittagong District and Chakoria Upzila of Cox’s Bazar District in Bangladesh.

**Nishorgo Support Project (NSP)** – refers to the programs under which “Co-Management” activities are being implemented by the Forest Department (FD), Ministry of Environment and Forest (MOEF) of Bangladesh.

**Participation** – refers to the involvement of target people (community of CWS) in sharing or taking part with others in the co-management activities. The research will evaluate 4-dimensions of participation: planning, implementation, evaluation and benefit-sharing.

**Local Community** – refers to the people in and around CWS who share social interaction with some common ties between themselves and the other members of the group, and who share an area for at least some of the time, in both a scale of analysis and the characteristic which are associated with a particular neighborhood.

**Local Community Participation** – refers to the ability of local communities in CWS to participate in terms of planning, implementation, evaluation and benefit sharing.

**Co-Management** – refers to building partnerships with different actors in CWS to achieve more effective and equitable systems of resource management. In CWS - co-management “actors” i.e. the representatives of resource user groups, government agencies (FD), non-government agencies (NSP, Arannyk Foundation) and key local and national stakeholders that can assist in conservation efforts – should share knowledge, power, and responsibility. Co-management is closely allied with collaborative management, Cooperative management, participatory management, community management, joint management, and stakeholder management.

# Research Methodology

## Study Area Selection

This research will conduct in Chunati Wildlife Sanctuary (CWS) falling within Banskhali and Lohagara Upzilas of Chittagong District and Chakoria Upzila of Cox's Bazar District, south-eastern region of Bangladesh. CWS is located in Chunati and Jaldi Forest Ranges covering Reserved Forest (RF) area of 7,763 ha. The Sanctuary is accessible from Chittagong city via national highway to Cox's Bazar (the Sanctuary lies almost halfway in between Chittagong and Cox's Bazar – nearly 70 km south of Chittagong). The Sanctuary was formally established under the Wildlife Act in 1986. In 2004, the Sanctuary was selected as one of the five pilot sites for co-management under the Forest Department's Nishorgo Program.

## Research Design

Research design in this study will combine between qualitative and quantitative data as shown in Figure 1.

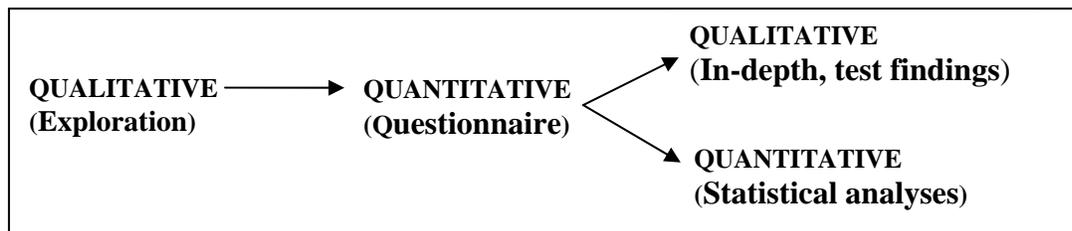


Figure 1: Research designs integrating qualitative and quantitative method

The design above alternated the two kinds of data collection, beginning with exploratory field work, leading to the development of quantitative instrumentation, such as, the questionnaire. The questionnaire findings will further be deepened and tested systematically with the next round of qualitative and quantitative works. Thus, this study will be in the form of the qualitative-quantitative linkage.

## Population and Sampling Techniques

Population of the research will be the community of Chunati WS, Chittagong/Cox's Bazar district of Bangladesh. The unit of analysis will be household in the community of Chunati WS. Purposive sampling technique will be used. The respondents will be selected from those who are **members of co-management committee/activity**.

The total number of samples (sample size) will be determined by using the Yamane (1973) formula:

$$n = \frac{N}{1 + N.e^2}$$

Where,

n = sample size

N = population size

e = precision or desired margin of error (5-10%)

## **Data Collection Methods**

To ensure reliability and reduce misinterpretation the method of **triangulation** will use. Triangulation is broadly defined by Denzin (1978) as “the combination of methodologies” in the study of the same phenomenon. In this research, from the conceptualization to analyzing phase, different methods and techniques will apply as described below:

**Reconnaissance survey:** An initial survey was conducted to acquaint with the area and to collect some basic data about the physical setting, land use practices, and the people and culture. Some logistical arrangement and introduction to the villagers/community will discuss during this visit.

**Participant observation:** Participant observation is one of methods in qualitative research. The observation method is useful for both collection and triangulation of information. Visual inspection and questionnaire surveys among respondents are undertaken simultaneously. Observation during discussion allows the researcher to get more insights in the situation. Through participant observation, it is possible to describe what goes to, who or what is involved, when and where things happen, how they occur and why – at least from the standpoint of participants – things happen as they do in particular situations. In this method, the researcher used **observer as participant**, because the community know that researcher will study on their activity/culture.

**Interview method:** One quantitative method in the field research is the interview or questionnaire study. The interview method will employ to collect data from the local community in Chunati WS. To have an in-depth information, interview schedule and unstructured questionnaire will use, besides personal interview.

**Semi-structured interview:** Semi-structured interviews will conduct with relevant individuals with specific knowledge about particular topics including local FD staff, NSP staff, village/community Headman, UP member and villagers to get in-depth questionnaire surveys and clarify certain issues.

**Group discussion:** A checklist will prepared for group discussion in order to guide as a scope of this study. Group discussion will conduct to get more details and investigate the collective vision. Moreover, it promotes common understanding and also confirms the questionnaires.

## **Data analysis**

Both qualitative and quantitative approaches will use for analytical purposes. In quantitative analysis, simple frequency distribution, percentage (%), mean (average), range and standard deviation will employ to examine the quantitative data into more functional design. Simultaneously, qualitative information from open questions and dialogues with key informant and group discussion will scrutinize through simply sorting out the most consensuses from the various responses and describing their arguments in some cases. This type of analysis assisted the understanding the situation in deeply and details.

## **Data measurement**

**Type of local community participation** – the type of participation will be modeled by Deshler and Sock. There are two type of participation: **pseudo and genuine** participation. Pseudo participation consists of two types: **domestication and assistencialism**, while genuine participation is **cooperation and empowerment**. In this research, types of participation will measure through their responses to situations that describe the types of participation under the pseudo and genuine participation. All the co-

management activities go through the 4-project phases. These are **planning, implementation, monitoring and evaluation (M&E) and sharing of benefits**. Responses to the questions will be in four choices representing **domestication, assistencialism, cooperation and empowerment** and will symbolize by **D, A, C** and **E** respectively. If three or more of the five responses to the activities in each project phase are the pseudo participation type, then the respondent will consider as exhibiting pseudo participation. Otherwise the respondent will consider exhibiting genuine participation.

**Level of conflict** – Conflict refers to the direct and open antagonistic struggle of individual or groups for the same objective or end. It is the expression of disagreement on co-management activities. It will measure on the basis of the frequency of occurrence of conflict using a 4-point scale to responses: **slightly = 1, moderate = 2, considerable = 3 and highly considerable = 4**.

**Level of cooperation** – Cooperation refers to the actions of an individual or group toward a single effect or toward the achievement of a common purpose. Furthermore, cooperation is the working together of community to cooperate with others on co-management activities. It will measure using a 4-point scale to responses such as: **low = 1, moderate = 2, strong = 3 and very strong = 4**.

**Perception of community about co-management activities** – refers to the respondent's view about the co-management in terms of group objective, duty and right of members. It will measure in terms of the degree of views of the respondents on statements that will ask to the respondents using a 5-point scale: strongly disagree = 1, disagree = 2, neither disagree nor agree = 3, agree = 4 and strongly agree = 5. The total of the perception about co-management activities score will be taken by accounting the number of statements which respondents will give a score. If this number score is greater than 50% of the statements, the respondents will classify as having **high perception**. Those with the number score between 33-50% will consider as having **medium perception**. While the number score below 33% will consider as having **low perception**.

**Community perception on the contribution of co-management activities to the sustainable development for the community of Chunati WS** – refers to the respondent's view about the extent to which the co-management activities contribute to Chunati community's sustainability. It will measure on 3-dimensions: environmental/ecological, human/social and economic. The environmental/ecological dimension will consider whether the local people feel that the activities they do for co-management ensured efficient and frugal use of protected natural resources. The human and social dimension focus on whether it will perceive that the co-management activities will help to improve education, health, nutrition and the status of women (i.e. making them part of the management activities). The economic dimension look into the extent to which the activities contribute to the attainment of productivity as well as equitable access to resources, income and resources for investment.

The determination of participation of sustainability based on the scores assigned by the respondents to the activities in the 3-dimensions of sustainability using a 5-point scale from 1 to 5, with 5 being the highest in sustainability. For each of the dimensions, the mean will be computed to use as the basis for determining the extent to which the co-management activities contributed to sustainable community development. The overall perception of an activity will reckon on the basis of the overall mean. Activities with scores that fell within or more than the mean will consider as having **high sustainability**. Otherwise, they will consider as having **low sustainability**.

## Time-Table (Work Plan) of the Research

Based on the proposed methodology, work plan of this research can be summarized as shown in Table-1.

Table-1: Work-plan of this research

Activities	Month					
	1	2	3	4	5	6
Literature review	←→					
Data collection		←→				
Data analysis				←→		
Report writing		←→				
Final report publishing						←→

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