# Co-management and wildlife conservation of the Lawachara National Park, Bangladesh

A research proposal submitted to Nishorgo Support Project and East-West Center for Applied Research Fellowship Program: Co-management of Protected Areas of Bangladesh

# Submitted by

Mohammad Abdul Aziz Lecturer, Department of Zoology Jahangirnagar University, Savar, Dhaka 1342, Bangladesh Cell: 01716256193; Email: wildsamaa@yahoo.com

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#### 1. Introduction

The Lawachara National Park (LNP) is one of the richest and best quality protected areas in Bangladesh. This park is the only area which harbours the highest numbers of primate species (6 species) out of 10 found in the country along with other the richest wildlife fauna as well as the supporting plant species (IUCN Bangladesh, 2000). Most of the protected areas of the country are now under huge human pressure due to indiscriminate overexploitation by the local communities. Failure to convince the local people that they are the owners of that natural resource and it is their responsibility to conserve it for their future generation is one of the root causes for continuing degradation and destruction of most of the protected areas in the country.

Lawachara National Park (24030'-24032' N and 91037'-91039'E) is located nearly 160 km northeast of Dhaka and approximately 60 km south of Sylhet city (nearly eight km east of Srimongal, on way to Kamalganj) at 9b-Sylhet Hills Bio-ecological zone. This LNP was notified in 1996 with a total forest area of 1250 hectares. The Park is crossed by a paved road and railway line linking the towns of Sreemongal and Kamalganj. The forest types of LNP is mixed-evergreen (IUCN Bangladesh, 2000) which characterized by six broad habitat types as high forests represented by the remaining patches of natural forests, plantations including the monoculture of exotics, grasslands and bamboos, wetlands in the form of seasonal streams, Tea Estates surrounding the park, and cultivated fields practiced by local and ethnic communities. LNP lies between the Dholai River on the east, the Manu River on the north, and the road from Moulvibazar to Srimongal on the west. A number of sandy-bedded streams and canals pass through the Park and so aquatic habitats associated with forest cover and riparian (streamside) vegetation and animal species are important part of overall habitat composition.

The forests of Lawachara Park are very rich in terms of biodiversity. A good number of animal species of both forest-dwelling and wetland-associated species could be found in the Park. The Park and its adjoining areas of west Bhanugach Reserve Forests are supposed to be the home for 11 species of herpetofauna, 237 species of avifauna and 30 species of mammals (Feeroz, MM 1991). Viable populations of many small and medium-sized mammal species that can survive in limited forest areas and/or disturbed or secondary habitats are found in the remaining disturbed and fragmented habitat of the Park. Aquatic species including turtles and frogs could be found in the streams flowed through the park. The only lesser ape of the country, Hoolock gibbon (*Hylobates hoolock*) could be used as a keystone species for the development and implementation of forest management and conservation measures in the park.

# 2. Justification

Protected areas such as national parks and reserves now cover more than 12% of the world's land area (Chape *et al.*, 2003). According to the 1987 Statistical Yearbook of Bangladesh, forests cover 2.1 million hectares or 14.7% of total land area, but this represents neither the area under forest nor that under the control of the Forest Department (Rashid, 1989). In 1980, Gittins and Akonda (1982) estimated remaining

natural forest in Bangladesh to be 4,782 sq.km (3.3%) and scrub forest 9,260ha (6.5%). Actual forest cover is presently estimated to be 1 million hectares or 6.9% of total land area, a reduction of more than 50% over the past 20 years.

Conservationists recognize that many protected areas have limited future prospects without the cooperation and support of local people, especially in developing countries. Since the 1980s integrated conservation and Development Projects (ICDPs) have attempted to reconcile park management with local needs and aspirations, usually with disappointing results. Fortunately, the lessons from the ICDP experience provide an important opportunity to inform the next generation of biodiversity conservation programs, including those concerned with poverty alleviation as well as those working with ecosystem and landscape scales. More recent and more promising approaches have started to incorporate elements of adaptive management, new partnership models with stakeholders and the vertical integration of site-level work with policy initiatives and institutional development (Chape *et al.*, 2003).

Now it is well understood that most of the management and conservation efforts taken so far for protected areas failed to address the most crucial issues, i.e., the involvement of the local communities with the management who have fair share with those of the natural resources. Local communities are often deeply attached by cultural traditions to their environment may be expected to play a far more positive role in conserving the biodiversity of the country. As historically most of our protected areas have been inhabited and used by the local people and stakeholders, there is crying need to manage and conserve these PAs along with other wildlife fauna by the integration of local stakeholders in management process and sharing the benefits from the mutual involvement of the process. Under Forest Department, Nishorgo Support Project (NSP) has been introduced and implemented co-management model in the form of comanagement council (CMC), co-management committee (CMCo) and forest user groups (FUGs) for management and conservation of the five pilot protected areas of the country. Lawachara National Park is one of the five pilot sites where this comanagement model has been formed and activated. The proposed research has been aimed to understand the policy, action plans with decision-making, participation and activities in NSP and the co-management process. I will also look at the perceptions about knowledge of wildlife and its conservation among these people and outside of the process living in and around the Lawachara National Park. The results of the proposed research would be useful to provide inputs in the co-management process which in turns help make the systems stronger and successful for long term conservation management of the protected areas of the country.

#### 3. Research Objectives

The present research has been aimed to explore the following objectives-

- 1. What are the activities in existing plan of NSP for wildlife conservation of LNP?
- 2. What are the activities in co-management process for wildlife conservation?
- 3. What are perceptions about the wildlife among local communities?

# Objective 1: What are the activities in NSP for wildlife conservation of LNP?

To explore the answer of this question, I would look at to-

- a) assess the management and action plans for wildlife conservation in NSP;
- b) find out the activities for wildlife conservation in NSP;
- c) find out the gaps in NSP implementation for wildlife conservation.

# Objective 2: What are the activities in co-management process for wildlife conservation?

To achieve this objective, the following activities will be carried out for understanding to-

- a) analyse the decision-making, implementation and participation of the activities for wildlife conservation in co-management council, committee;
- b) analyse the perceptions about wildlife conservation among council, committee, and FUGs people as well as about NSP activities, and
- c) analyse the perceived lacking in co-management activities or/and in Bangladesh Wildlife (A) (P) Act, 1974 for wildlife conservation among the people of CMC, CMCo, FUGs.

#### **Objective 3: What are perceptions in communities about the wildlife?**

To understand the perceptions about wildlife among the community people, I would like to-

- a) assess the general knowledge about selected species as Hoolock Gibbon, Oriental Pied Hornbill, Rock Python and Tree frog;
- b) assess community perceptions on the activities and effectiveness of NSP, council, committee and FUGs for wildlife conservation.

### 4. Methodology

Both of primary and secondary data will be collected and used for the present research. The primary data will be collected interviewing the members of co-management council, committee, FUGs, forest officials, stakeholders, local and ethnic communities etc. The later one will be collected by through study of the different components of Nishorgo Support Project; structure, responsibilities and activities of co-management council, committee and FUGs. The data will be collected by Literature review, semi-structured interviews and key informant interviews.

#### 4.1 Literature review

Literature study will be carried out to find out the management plans, actions and activities included in NSP, Co-management process, FUGs. **Objective No. 1** will be achieved by this method.

# **4.2 Open-ended Questionnaire interviews**

Under NSP, as part of the co-management process and activities, co-management council and co-management committee already have been formed by involving civil society, political leader, people from local govt., resource user groups, ethnic and religious representatives etc. In co-management council, there are 55 members selected from 5 groups of stakeholders where 15-19 members for the co-management committee selected from 10 groups of stakeholders (Bangladesh Gazette Circulation, 2006). Of these, 5 members from the council and 5 from the committee will be interviewed with open-ended questionnaire format to achieve the desired information. There are 90 forest

user groups (FUGs) identified in and around the LNP (DeCosse, P., pers. com.). From 22 villages living in and around the LNP, Garo bosti and Kalapur will be considered for the study. The first village is an ethnic community while later one local is the basis of selection. Three persons from randomly selected 2 FUGs of each of the village. Of this, 3 persons from each of the randomly selected 2 FUGs will be considered for data collection. Again, 2 persons from randomly selected 2 non-FUGs of same villages will be selected. This method will be used to achieve the **Objective No. 2**. for exploring the **Objective No. 3** (a, b). Photographs of the major and mentioned wildlife species will be shown to the interviewers help identify and recognize the particular species.

#### 4.3 Key informant interviews

This technique will be used for interviewing indigenous knowledgeable persons, ethnic leaders, mohalders etc. to understand the perceptions on NSP, Co-management council and committee and to find out the effectiveness of the above. This method will help to understand the **Objectives 1(b), 2(b, c) and 3(b)**.

### 5. Time frame of the research project

The field works will be carried out as per the following schedule-

Activities	January	February	March	April	May	June
Preparation						
Data collection						
Data documentation						
Report writing						

#### 6. References

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