

# The scenario of man-elephant conflict in Hoollongapar Gibbon Wildlife Sanctuary of Assam, India

Sujayita Bhattacharjee

**Abstract-** Man-elephant conflict is a crucial problem concerning the north-eastern part of India. It has assumed a severe character due to increasing human population, diminishing forests and consequent habitat loss of the elephants. Likewise is the case in Hoollongapar Gibbon Wildlife of Assam. This wildlife sanctuary is a home to the endangered Asian elephants and the increasing man-elephant conflict in this region is posing serious threat to the elephants of the sanctuary. Moreover, the local inhabitants are also suffering a lot due to the increasing conflicts with the elephants. This paper is prepared in the light of the situation's gravity, which demands proper study on it, so that the causes of the problem can be identified and necessary suggestion can be forwarded for its solution.

**Index Terms-** Man elephant conflict, Gibbon Wildlife sanctuary problem

## I. INTRODUCTION

Conflict between man and elephant is not new. Rather it's as old as the human civilization itself. But in today's world this issue has grabbed serious concern due to the fast decrease in elephant population world-wide. Elephants are gradually getting endangered and man-elephant conflict being one of its prime causes. Each year, human-elephant conflict results in about 300 human deaths and damage to 10,000-15,000 houses and 8-10 million hectares of crops, while over 200 elephants die due to human-related activities, which include poaching for ivory or meat, poisoning, cattle-borne diseases, electrocution and collision with trains (Bist 2002).

Hoollongapar Gibbon Wildlife Sanctuary, also commonly known as Gibbon wildlife Sanctuary is tremendously suffering from the problem of man-elephant conflict. The problem is growing day by day and has become a great cause of concern in the region as it poses great threat to the lives of not only the humans but also the elephants. There are frequent news of deaths and casualty in the region owing to conflict between man and elephants. Although the inhabitants of the region and its vicinity seem to be concerned with it but not much has been done for its amelioration.

## II. STUDY AREA

The Gibbon Wild Life Sanctuary is located in the Jorhat district of Assam (India). It is situated in close proximity to the Naga Hills and the town of Mariani. Its geographical location is 26°40'N to 26°45'N latitude and 94°20'E to 94°25'E longitude.

As per the official records, the sanctuary accounts for an area of 20.48sq.km (Figure: 1).

It is a semi-evergreen forest region dominated by tropical moist deciduous vegetation. It is an abode of many rare species of flora as well as fauna. This sanctuary has the distinction of having altogether seven primate species. The Bhogdoi River flowing in the direction from south-east to north-west distinctly demarcates the sanctuary by a permanent physical barrier and along the most part of the boundary line of the sanctuary stands the settlement areas and the tea gardens (Bhattacharjee, 2008) (Figure: 2).

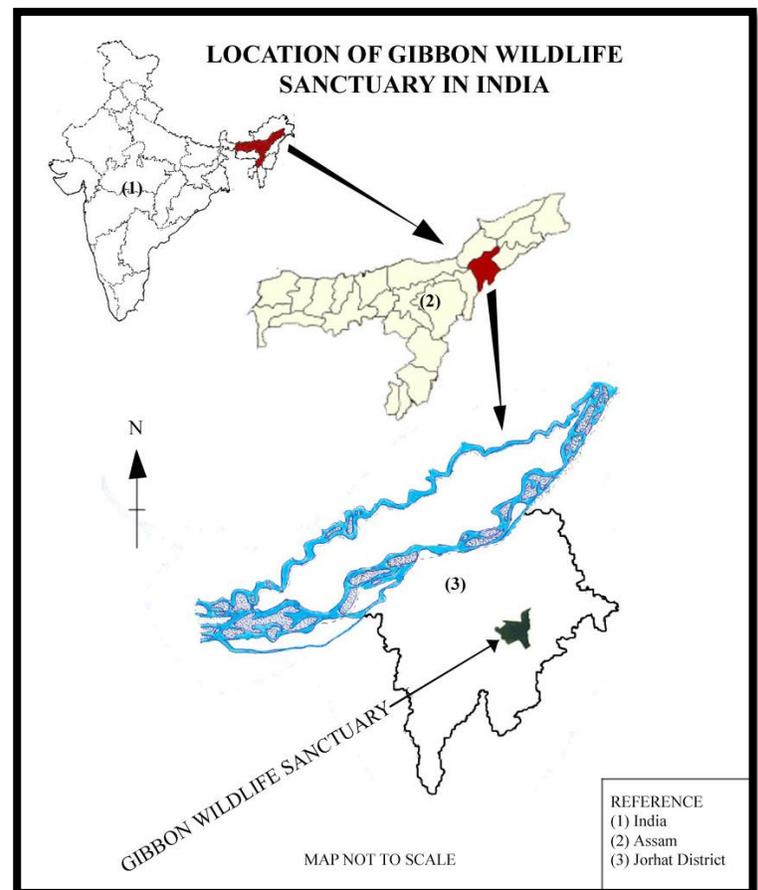


Figure 1: Location map of the study area.

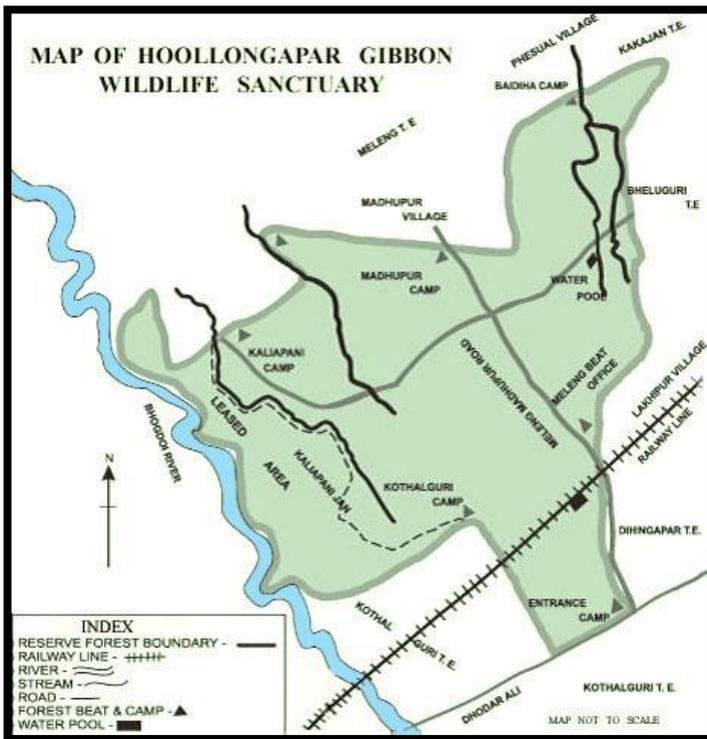


Figure 2: Map of Gibbon Wildlife Sanctuary

### III. DATABASE AND METHODOLOGY

The entire frame of the study is categorically built on rigorous field investigation and observation. As such the data collected are mostly primary in nature. However, along with it some secondary sources of data like books and journals, etc have also been consulted to prepare the report. Both inductive and deductive approaches are adopted in the study.

### IV. ANALYSIS AND FINDINGS

The area of Gibbon Wildlife Sanctuary is merely 20.48sq.km, which is too small in size to provide the requirement of habitat. Besides, the increasing population pressure has led to large scale human settlement in the periphery areas of the sanctuary and many small villages have come up in the region by encroachment of the forest area. These villages were established during the 60's to rehabilitate the flood affected landless people of Majuli and adjoining areas (Hazarika & Gupta, 2005). This has led to frequent conflict between man and elephant. This problem has developed simultaneously for both man and elephants due to their growing population and consequently growing needs. Infact, frequent invasion into each other's territory by the humans and the elephants has become a common practice in the region.

Previously, the sanctuary extended up to the Naga Hills and was connected to the Dissoi Valley Reserve Forest. But with the growth of tea gardens in the subsequent periods the sanctuary gradually got detached from the Reserve Forest area, giving rise to the problem of space and food. At a trace the sanctuary can

provide food to the elephants for hardly three to four months (Bhattacharjee, 2008). So, the elephants have a natural tendency to move towards the Desoi valley Reserve Forest in search of food. Demolition of the elephant corridor linking Gibbon Wild Life Sanctuary and the nearest Desoi Valley reserve forest is perhaps a major set-back associated with this problem of depredation (Bhattacharjee & Goswami, 2009). This movement of the elephants happens through the tea-gardens and the village settlements which have grown between these two forests areas. This causes panic among the villagers and the people of the tea garden, compelling them to adopt various measures to drive the elephants away. This gives rise to serious conflict between man and elephants in the region. In this course of action loss occurs to both life (man & elephant) and property.

The Hoollongapar Gibbon Wild Life Sanctuary does not have a permanent source of water. The run-off water of the channels is very quick and during winter season these channels dry up. Water retains only in small pockets of the sanctuary. Although the river Bhogdoi flows in close proximity to the sanctuary, there is large scale human settlement near it. As such very often when the elephants go to the river in search of water, the human population of the region gets frightened and tries to drive off the elephants resulting into conflict between man and elephants.

In search of food the elephants very often break-in the agricultural fields in the village area. To save their crops the villagers try to scare away the elephants and indulge into conflict with them.

The people of the nearby tea-garden area are in the habit of making and consuming home-made country liquor, of which these elephants are very fond off. So, in search of this liquor the elephants frequently visit the tea garden area and plunder the houses.

The sanctuary in the absence of any proper demarcation cannot restrict the movement of elephants outside and makes them vulnerable to poaching. Moreover, the habitat in this forest is highly degraded due to continuous illegal felling and encroachment by the local people especially by the labourers of the adjoining tea gardens (Chakraborty & Gupta 2005).

The most shocking part of affairs is the existence of a railway line which divides the sanctuary into two parts. This railway line serves as a death trap for the animals. There are many incidences of elephant (and other animals') injuries and deaths in the sanctuary owing to train accidents.

### V. SUGGESTION AND CONCLUSION

From the findings of the study it is quite clearly that man-elephant conflict in the region is an outcome of the growing space crisis. This space crisis is a product of the diminishing area of the sanctuary, increasing human population in its periphery combined with human interference within the sanctuary and shortage of food and water in the sanctuary (Figure: 3).

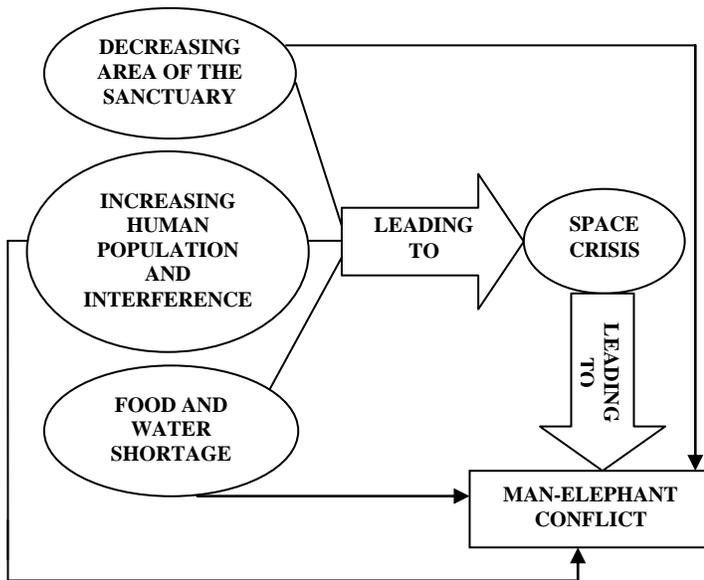


Figure 3: Entwined causes of man-elephant conflict in Gibbon Wildlife Sanctuary.

Keeping this in view the following suggestions are forwarded to tackle the problem of man-elephant conflict in the region:

- (a) The government land attached to the sanctuary must be brought under its jurisdiction which will enlarge the space and enable free and fare movement of elephants and the other animals.
- (b) To provide food and shelter to the elephants of the sanctuary proper emphasis should be given to develop a more variable and feasible dense forest cover.
- (c) It is necessary to derive a solution to open up the elephant corridors for free movement out wards of the sanctuary without disturbing the settlement areas.
- (d) To reduce the intensity of elephant deaths and injuries due to train accidents, the railways authorities may be requested to reduce the speed of trains while passing through the Sanctuary area.
- (e) Alternatives should be given to the livelihood of the neighboring villages. This will reduce the dependency of the people on the sanctuary and there by decrease the intensity of man-elephant conflict in the region.
- (f) A buffer zone can be created between the sanctuary and the settlement area by planting unpalatable crops like chilly, citrus and tobacco, etc along with thorny bushes.

- (g) Emphasis should be given to develop a permanent fresh water ecosystem, so that sufficient drinking water is available for the elephants within the sanctuary itself.
- (h) The local people generally use various unscientific measures (like bursting fire crackers and throwing stones) to control elephant depredation. This aggravates the problem rather than solving it. As such the local people should be imparted proper training by the forest officials, so that they can drive away the elephants using proper scientific methods. This would help in reducing man-elephant conflict in the region.
- (i) A radically different forest management policy based in joint management principle (People-Forest Department-traditional institutions- NGO's) is essential to be adapted on the basis of the sanctuary's need and existing pattern to check the problem of man-elephant conflict.

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#### AUTHORS

**Sujayita Bhattacharjee**

**Qualification** – M.A (Geography) from J.B College, Jorhat & M.Sc (Geo-informatics) from IIEE, New Delhi, India.

**Email** – sujayita100@gmail.com