

A Sturdy on the Conflicts between Human and Elephants in North-Eastern States Of India

Rashmi Mehrotra

Faculty of Education, Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, India

ABSTRACT: Human population rises and growth has occurred in Northeast India. Decreased and fragmented habitat for wildlife, which has resulted in human conflicts over wildlife. While there are species like tigers (*Panthera tigris*) and elephants (*Elephas maximus*) have become the focal point for conflict and conservation problems, triggering conflict (*Rhinoceros unicornis*). To highlight the complex nature of human-elephant conflicts, this article discusses many case studies. As a result of these conflicts, more than 1,150 humans and 370 elephants died between 1980 and 2003. While measures have been taken by the public and government, human population increase must be tackled before any lasting solutions to this conflict can be found.

KEYWORDS: Human-wildlife conflict, Elephant, Fragmentation, Conservation, India

INTRODUCTION

There are several states in Northeastern (NE) India, including Arunachal. The northern parts of West Bengal, Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, and Sikkim. This area covers approximately 274,680 km² (Figure 1) and constitutes a 'hotspot' for global biodiversity [1]. The Eastern Himalaya Mountains, the Meghalaya Plateau, hill ranges, the plains of the rivers Brahmaputra and Barak, and the valley of Manipur dominate the region. There are diverse ecosystems in NE India, including grasslands, wetlands, swamps, evergreen and deciduous tropical forests, subtropical and temperate forests, and alpine tundra. In India, the region has the highest diversity of mammals (250 species) and birds (900 species), many of which are threatened [2]. Human population increases and construction has decreased and fragmented habitat for wildlife. Natural habitat has been significantly invaded by settlement, agriculture and construction activities, leading to significant disputes between humans and wildlife (especially elephants, *Elephas maximus*). More than 1,150 humans and 370 elephants died in NE India between 1980 and 2003 as a result of human-elephant conflicts. But there is no evidence of case studies in this part of India, unlike parts of Africa [3][4][5][6]. Santiapillai and Widodo (1993) and Sukumarara (1993) provide brief overviews of Sumatra and Karnataka, South India (1986). To highlight the complex nature of human-elephant conflicts, this article presents multiple case studies from NE India [7]. Furthermore, the strengths and limitations of potential methods for mitigating these disputes are discussed.



Figure 1: Map of North Eastern India

Case Studies

Sonitpur Assam:

In Arunachal Pradesh and Sonitpur in Assam (contiguous), the Kameng region Habitat) to support a large elephant population ranging from 900 to 1200 species. At different times of the year, there are approximately 500 to 800 elephants inside Sonitpur in Assam. The elephants fly down from the Himalayan foothills in Arunachal Pradesh during the paddy season. These elephants also destroyed property in the early 1990s and raided crops. As a result of such human-elephant clashes, a few human deaths occurred, but elephants were generally unharmed. By the mid-1990s, however, politically driven innovations increased the degree of encroachment. By 2002, at least 50 percent of the region's prime elephant habitat was lost (Choudhury, 2002b) and clashes between humans and elephants became commonplace. Human deaths from elephants rose in 1993 (32), 2001 (26) and 2002 (28) and over 30 elephants were poisoned in Sonitpur and adjacent areas between 2001 and 2002 in retaliation. Intensified human consciousness, motivations, and compensation for human injury and death, and a "Elephant Reserve" was established. The restoration of elephant habitat to pre-1990 conditions is one of the only viable solutions to minimize this dispute (Bist, 2002; Choudhury, 2002a).

Garo Hills, Meghalaya, a significant elephant habitat (over 1,800 in 1993), and in 2002, 1,200). Increased jhum (i.e., shifting cultivation), coal) in this region. Elephants were greatly disrupted by mining, deforestation and poaching (for meat and ivory) (Gurung & Lahiri-Choudhury, 2000; Williams & Johnsingh, 1996). More than 200 elephants descended on the Goalpara district of Assam, where none during the 1993 census, they were registered (small

numbers used to be seen seasonally). In the dispersed forest blocks, approximately 100 elephants currently live and damage surrounding houses and property. As a result of clashes with elephants, there were no human casualties between 1990 and 1992, but a few people have been killed every year since 1993. No obvious solution is in sight.

Human-elephant in Mizoram, Nagaland, and in Manipur's hilly regions. There has been a different tradition of confrontation. Because of their skin, which is a local delicacy, elephants have almost always been persecuted. 10-12 elephants are currently located in Mizoram[8] and most are occasional/seasonal tourists in the hills of Manipur. Elephants have disappeared from most parts of Nagaland, but in a few pockets where the region is contiguous with Assam, some (above 200) are found.

Issues of Conservation

The Poaching:

Many animals (including elephants, rhinoceroses and tigers) are killed to sell their body parts globally. While poaching is not a direct cause of conflict, by killing humans and destroying their land, wounded elephants and other animals (e.g., tigers) sometimes retaliate.

Developmental activities:

Development programs call for confrontation between wildlife and humans. People Development kills and fragments the habitat of wildlife, blocks routes of migration, encourages invasion and promotes poaching. Bamboo harvesting for paper mills (Jagiroad, Panchgram, and Jogighopa in Assam; Tuli in Nagaland), oil mining/exploration (Assam and Arunachal Pradesh), and opencast coal mining (Assam and Meghalaya) have, for example, disrupted and damaged the habitat of wildlife and caused pollution. The employees have invaded the surrounding forestlands, many of whom are poachers. Because of other subsidiary operations, new settlements have been created.

Destroying the construction of highways, railways and other infrastructure projects and fragment natural habitat, and allow the incidence of invasion, logging, and poaching. Designed hydroelectric projects will flood substantial forest ecosystems along the rivers of Siang, Lohit, Dibang, Subansiri, and Barak[9]. Elephants would have less space to live and will lose several routes of migration; conflicts will increase.

CONCLUSION

For minimizing human-elephant, the following suggestions are provided the dispute in India's NE. Next, there is a need to establish new protected areas. Solely with There is an immediate need to establish more protected areas for about 25 percent of the habitat of elephants within protected areas. While it is not sufficient to designate an area as "protected," it provides a crucial legal step toward conservation and conflict reduction.

Second, the current protected areas should also be considered whenever possible. It is important to prevent the enlargement and fragmentation of protected areas. Third, migration corridors for elephants should be legally secured. Legal protection should be provided to corridors used daily by elephants. This is critical because any of the corridors are extremely unlikely to be merged into national parks or sanctuaries. In the context of a wildlife sanctuary where the corridors transit forestland, legal status should be given. However, as corridors

transit tea plantations, changing cultivations, and human settlements, problems arise. Humans and elephants in villages are primarily in direct confrontation. In other parts of the corridor, conflict is less of a concern because elephants typically migrate at night. Provisions for "protected elephant movement corridors" are proposed to be amended to the Indian Wildlife Protection Act. The land should continue to be owned by private owners for tea estates and changing cultivation areas, but the amendment will ensure that land-use changes do not occur in the corridors. The government will purchase strips of land in other locations under the Land Acquisition Acts and pay fair compensation.

REFERENCES

- [1] N. Myers, R. A. Mittermeyer, C. G. Mittermeyer, G. A. B. Da Fonseca, and J. Kent, "Biodiversity hotspots for conservation priorities," *Nature*, 2000, doi: 10.1038/35002501.
- [2] A. Choudhury, "Primates in Northeast India: An Overview of their Distribution and Conservation Status," *ENVIS Bull. Wildl. Prot. Areas*, 2001.
- [3] R. F. W. Barnes, "The conflict between humans and elephants in the central African forests," *Mamm. Rev.*, 1996, doi: 10.1111/j.1365-2907.1996.tb00147.x.
- [4] R. Bhima, "Elephant status and conflict with humans on the western bank of Liwonde National Park, Malawi," *Pachyderm*, 1998.
- [5] W. Kiiru, "The current status of human-elephant conflict in Kenya," *Pachyderm*, 1995.
- [6] C. R. THOULESS, "Long distance movements of elephants in northern Kenya," *Afr. J. Ecol.*, 1995, doi: 10.1111/j.1365-2028.1995.tb01042.x.
- [7] L. Naughton-Treves and A. Treves, "Socio-ecological factors shaping local support for wildlife: crop-raiding by elephants and other wildlife in Africa," in *People and Wildlife*, 2009.
- [8] A. Choudhury, "Elephas maximus, Asian Elephant," *IUCN Red List Threat. Species 2008*, 2008.
- [9] O. N. Dhar and S. Nandargi, "A study of floods in the Brahmaputra basin in India," *Int. J. Climatol.*, 2000, doi: 10.1002/1097-0088(20000615)20:7<771::AID-JOC518>3.0.CO;2-Z.