

Human - Elephant Conflicts in Terai - Dooars Region of West Bengal



Koushiki Nath

Student, B.Sc. 3rd Year
Department of Environmental Science
Asutosh College
koushiki.30.nath@gmail.com

The occurrence of significant animal losses in forest, whether due to accidents, poaching, or other activities is not new to us. Taking into consideration the encroachment of human settlements upon the wildlife habitats, conflicts between humans and animals have become increasingly common and widespread. Among the few major human-animal conflicts, the escalating conflict between humans and elephants has reached a critical point, resulting in numerous casualties on both sides, with

reported figures ranging from 50 to 100 per year (both sides), along with significant crop destruction. According to the statistics death of about 500 elephants has been reported in the last 5 years (2018-2023) due to unnatural causes like electrocution, poaching and train accidents in India, out of which West Bengal records a noteworthy number. Additionally, more than 1500 people passed away in the country in the last 5 years (2018- 2023) due to the human- elephant conflicts.[1]



Figure 1: Climate Change makes West Bengal Human Elephant Conflict Zone
[Source- Kalimpong News]



Elephants occupy expansive territories in their habitats. Habitat fragmentation or barriers to migration routes lead to conflicts between humans and elephants, causing damage to crops, property, households, and resulting in injuries and fatalities for both humans and elephants. Cultivated crops are readily available for elephants to forage on and are more easily accessible. Generally, they impact crops across vast regions, subsequently influencing the livelihoods of the cultivators. The intensity of conflicts is particularly pronounced in the Northern part of West Bengal, which has been broadly documented. This region witnesses some of the most severe human-elephant conflicts in Asia, resulting in significant damage to agricultural crops and an average of 50 human fatalities annually.[2]

The alterations in land use and land cover within and near wildlife habitats

significantly contribute to the frequent occurrence of human-elephant conflicts. Linear infrastructure such as railways and roads contribute to the fragmentation and degradation of forests. The increasing demand for resources such as non-timber forest products (NTFPs), firewood, fodder, and medicinal plants, as well as the expansion of infrastructure like railways and roads, exert growing pressure on forest land. This demand is exacerbated by the need for agricultural land, space for tea plantations, and informal settlements, leading to encroachment on peripheral forest areas and altering the natural landscape, particularly in elephant corridors. These developments disrupt habitat connectivity, sometimes completely blocking paths, forcing wild elephants to venture outside their habitats and resulting in frequent human-wildlife conflicts.[3]

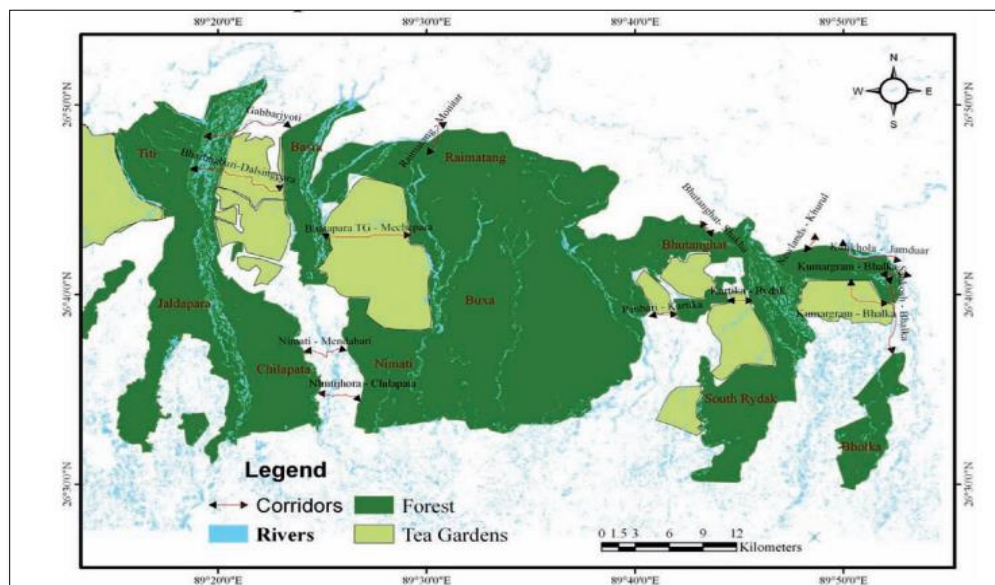


Figure 2(a): Elephant corridors of North Bengal (Sankosh to Torsha)

Regions with an elevated likelihood of conflict encompass the peripheries surrounding Buxa Tiger Reserve, Jaldapara National Park, Gorumara National Park, Chapramari Wildlife Sanctuary, significant tea plantations, and fringe settlements of Madarihat and Jaldapara North Range. The localities and sub localities of Kalchini, Meteli, and Chalsa regions also shows higher probability of negative interactions between human and elephants.[4]

The elephant corridors in the northern region of West Bengal are crucial conduits for the movement of elephants amidst increasingly fragmented habitats. One notable corridor is the Mahananda-Kolabari corridor, which connects the Mahananda Wildlife Sanctuary to forests in the Terai region. This corridor is vital for elephant movement between the forests of West Bengal and neighboring Nepal. Another significant corridor is the Buxa-Jayanti corridor, linking the Buxa Tiger Reserve with the forests of Jayanti. This corridor traverses diverse landscapes, including dense forests and riverine habitats, providing essential pathways for elephant migration. Conservation efforts in these invasion includes installing electric wire fences powered by solar panels in forest areas and sending bulk SMS alerts to villagers and village leaders. Additionally, water holes, fodder grass, and fruit trees were planted around the periphery to discourage elephants from venturing into human settlements for food.

Speed limits for several trains running in those routes have also been restricted.[6]

The State Forest Department also launched a new initiative namely “Gaja Mitras” or the “Friends of Elephants” in the recent years. Villagers residing near the forest areas are appointed so that they can safeguard both humans and elephants, aiming to prevent clashes and provide early warnings to villagers about elephant movements, reducing risks to both communities and wildlife. The project initially is implemented in the districts of South Bengal due to rapid forest clearance in those regions, but it is expected that it will soon be executed in the districts of North Bengal like Alipurduar, Jalpaiguri regions.[5]

The Forest Department of West Bengal began regular awareness campaigns in the year 2020 with villagers to educate them on safety measures during elephant corridors involve initiatives such as habitat restoration, land-use planning, and community-based conservation programs to mitigate human-elephant conflicts and ensure the long-term viability of elephant populations in the region.[7]

Growing human-elephant conflict in forest areas, notably in northern West Bengal, underscores the need for collaborative action. Loss of life on both sides highlights the urgency for proactive measures. [8] Habitat fragmentation, encroachment, and resource depletion contribute to increased conflict. Conservation efforts, including preserving elephant corridors and innovative programs like "Gaja Mitras," when implemented, aim to address these challenges and foster coexistence.





Figure 3: An elephant tries crossing the railway tracks in Rajabhatkhowa, West Bengal.

[Source- India Today]

REFERENCES:

1. Banerjee, D. (2020, April 27). The elephant conflict story from the Terai region, West Bengal. Human & Environment Alliance League (HEAL).
2. Chamling, M., & Bera, B. (2020). Likelihood of elephant death risk applying kernel density estimation model along the railway track within biodiversity hotspot of Bhutan–Bengal Himalayan Foothill. *Modeling Earth Systems and Environment*, 6(4), 2565-2580.
3. Chauhan, P. (2020, September 25). West Bengal becomes human-elephant conflict zone. *Planet Custodian*.
4. Chauhan, P. (2020, September 25). West Bengal becomes human-elephant conflict zone. *Planet Custodian*.
5. India Today. (2019, September 27). Train hits and critically injures elephant in North Bengal. *India Today*.
6. Indian Express. (2022, December 1). Train driver's alertness saves elephants crossing tracks. *The Indian Express*.
7. NBC News. (2013, January 6). Elephant killed by express train in Indian wildlife reserve. *NBC News*.
8. Rai, A. K. (2020, September 20). Climate change makes West Bengal a human-elephant conflict zone. *Kalimpong Online News*.