



Deviant death of elephants in agrarian landscapes in southern Bengal

The Asian Elephant *Elephas maximus*, a long-ranging social animal, has been severely affected by habitat alteration caused by anthropogenic activities. Due to habitat loss, these animals have been forced to move through human-dominated landscapes in order to meet their extensive dietary requirements, resulting in negative human-elephant interactions (Naha et al. 2019).

In contrast, there has been very little elephant migration in southern Bengal over the last century. The migration of elephants started from the Dalma range in Jharkhand to southern Bengal in the 1960s and 70s. Previously, they spent very little time in Mayurjharna Elephant Reserve; it was mostly a seasonal migration. Another major reason for the change in the movement was the forest degradation in the Mayurjharna Elephant Reserve that necessitated their range expansion in southern Bengal.

The study reported that the distribution range of elephants from central India to southern Bengal has expanded from 1,200 sq.km in the 1950s to 13,200 sq.km by 2010–18 (Kumara et al. 2019). The expansion of their distribution range is happening in the agrarian landscape of southern Bengal despite the dearth of continuous forests. In the last 20 years, as the number of elephants increased



The carcasses of the elephant were found at Belboni, Bankura on 07 March 2022 (top) and on 12 March 2022 (bottom).
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yearly, a few of them became residential in the Bankura North Division. After crossing the Damodar River, elephants have begun to move towards Purba and Paschim Bardhaman in the last few years.

The forest areas of Bankura North Division are home to two types of elephants: residential elephants and non-residential elephants.



When most of the elephant herds migrate from Panchet Division to Bankura North Division (particularly the Barjora and Beliatore ranges), the residential elephants revert to the Bankura North Range. The forest department uses electrically-charged fencing to keep elephants in certain areas of the district. However, the fencing (which employs a battery system) delivers a low-power shock to the elephant. Some people are illegally hooking up power lines with high-voltage electric wire and fencing their cropland. It could be 220V, 440V, or 11,000V. This type of practice is becoming more common among farmers in southern Bengal, an area known for elephant movement.

Kumara et al. (2019) reported a number of unnatural deaths in the period between June 2013 and February 2017. Eight elephants died as a result of electrocution, five of which were from Bankura North Division. In addition, 10 elephants died in retaliatory killings simultaneously. Nine of the 10 deaths occurred in the Bankura North Division. However, between 2010 and 2018, there were 268 human deaths caused by elephants, and 372 people were injured (Kumara et al. 2019). In Bankura North Division, 42 people were killed and 72 were injured by elephants. The intensity of intolerance at the human-elephant interface has been perceived to have increased in recent times in the region. Many of the farmers have small, marginal plots of land. They face crop destruction or loss due to the elephants' movements. In such circumstances, human-elephant interfaces are likely to have resulted in the retaliatory killing and electrocution

of elephants. Electrocution has become widely known as an effective means to kill elephants. It is a common practice reported from other parts of India (Sukumar 1989; Gubbi 2009). The most recent two incidents occurred at the Bankura North Range of the Bankura North Division, where potatoes and wheat are now the major crops grown during winter.

On 12 March 2022 (Saturday), a fully grown adult male elephant carcass was recovered from a village in Bankura North Division, the third such incident in southern Bengal in 10 days. The elephant appeared to have died after being electrocuted by a live wire wrapped around in a crop field at Belboni Beat. It is most likely a person's private farm that is fenced with high-voltage electric wires. However, further confirmation is required to support the claim. Only the elephant's front trunk has some burnt marks and the wounded area suggests that the elephant died as a result of an electric fence (Image 1a). Five days ago, on 7 March 2022 (Monday), a tusker from the same area died in a similar manner (Image 1b). A notice given on 14 March 2022 indicates that the Bankura North Forest Department arrested a person from Belboni under the Wildlife (Protection) Act, 1972. When he was produced in Bankura court, the judge granted him 14 days of judicial custody (Bankura North Forest Division, 2022).

The increased number of elephants, as well as their constant movement between remnant forest patches and agricultural fields, adds to the human-elephant interfaces. It



has lowered the level of tolerance among the locals. People who lived in these areas a century ago were not accustomed to live alongside elephants. In contrast to other parts of India where elephants have been present for a long time, the people in this region are linked to elephants in both sociocultural and ecological aspects. Therefore, a greater emphasis on public education in the ecological and sociocultural aspects of life in southern Bengal is highly required through an interdisciplinary approach.

A large-scale awareness programme for farmers and local people in high-conflict areas, as well as immediate attention by the forest department to conflict issues, would help to restore local people's trust in the management. Despite having very little manpower to respond to such incidents in a timely manner, the forest department is doing their best. The government of West Bengal should concentrate its efforts in areas where elephants are known to congregate. More personnel should be assigned to the forest department in order to build a bridge of communication between them and the local residents. The information about the daily movement of elephants must be more widely disseminated at the village level, particularly in areas where residential elephants reside.

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