

Current Status of Asian Elephants in Bangladesh

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Introduction

Having been extirpated from most of the country, elephants are critically endangered in Bangladesh (IUCN Bangladesh 2000). Bangladesh is one of the most densely populated countries in the world and having a still growing human population, elephant conservation faces many obstacles. Lack of awareness has been identified as one of the most important challenges for natural resource conservation in Bangladesh (Chowdhury *et al.* 2011), which also effects elephant conservation. A survey of people in the Chunati Wildlife Sanctuary found 49% willing to conserve elephants, 16% undecided, and 35% against their conservation (Islam 2006). In a survey of 388 people in four protected areas (Teknaf Game Reserve, Chunati Wildlife Sanctuary, and two Reserve Forests in the south-east and the northeast) almost two-thirds stated that a protected area with wild elephant conservation would provide people with no value, while the remaining one-third agreed with the recreational value and the importance of elephant conservation for biodiversity and ecology (Sarker & Røskaft 2010). The distance people lived from a park (closer more negative) and the financial status (poorer more negative), were found to be the main predictors for attitudes of forest villagers towards elephant conservation (Sarker & Røskaft 2010).

In the past, wild elephants were captured by *Kheda* (stockade) operations, which were first practiced in Bangladesh in 1868. The Forest Department started *kheda* operations in 1915. *Kheda* operations were stopped in Bangladesh

in 1965 (Islam 2006). All wild elephants are now protected under the Bangladesh Wildlife Conservation (Amendment) Act of 1974 and cannot be hunted, killed or captured. The act has provision for the Chief Wildlife Warden to declare an elephant as a 'rogue elephant' and issue a special permit for destroying it. According to the Wildlife (Conservation) Act (Draft) 2011, the penalty for killing an elephant will be imprisonment for 2 - 7 years or a fine of Tk 100,000- 1,000,000 (US\$ 1,420-14,200) or both, and for a repetition, imprisonment and a fine of Tk 1,200,000 (US\$ 17,140) or both (MoEF 2011). The Act has been tabled at the parliament and sent to the Parliamentary Standing Committee responsible for MoEF for review.

Wild elephants

Past distribution

Only about a hundred years ago, elephants were abundant in most forests of Bangladesh, including places such as Madhupur near Dhaka. In early 1990s the number of wild elephants was estimated to be 195-234, with 83-100 of them being trans-boundary elephants (Chakraborty 1996; Islam 2006).

Current distribution

Resident wild elephants are present only in the south-east. They occupy forests in Chittagong, Chittagong Hill Tracts and Cox's Bazar areas (Fig. 1) (Islam 2006). Trans-boundary elephants occur in the north-east and south-east, with ranges

overlapping neighbouring India and Myanmar. In the north-east, elephants in Kurigram, Sherpur, Netrokona and Maulvi Bazar districts, have trans-boundary ranges overlapping the Indian states of Meghalaya and Assam (IUCN 2004; Islam 2006). In the south-east, some herds in the Chitagong Hill Tracts move to and from Mizoram state of India and some in the Teknaf area in Cox's Bazar move to and from Arakan of Myanmar. The presence of non-resident elephants in Bangladesh coincides with paddy harvesting seasons, i.e. February-May and September-December.

Numbers

There maybe around 300-350 wild elephants (Fig. 2) in Bangladesh of which around 200 are resident and 100-150 have trans-boundary ranges. In 2003 the elephant number was estimated as 178 based on dung counts, and as 196-227 residents and 83-100 non-residents based on interviews and sightings (IUCN 2004). Non-resident elephants consisted of 8-10 in Rajibpur of Kurigram district, 40-45 in Nalitabari of Sherpur district, 20-25 in

Durgapur of Netrokona district, and around 10 in the Sylhet forest division of the Maulvi Bazar district, (IUCN 2004; Islam 2006). In 2008-2009, Wildlife Trust of Bangladesh (WTB) and Zoo Outreach Organization (ZOO) India, reported 100-120 elephants in Nalitabari of Sherpur and 50-70 in Durgapur of Netrokona, and 30-35 in Rangunia of Chittagong, based on a participatory rural appraisal and questionnaire survey.

Threats

Habitat loss and fragmentation have had a severe impact on the wild elephant population in Bangladesh (Islam 2006). It is estimated that the national forest cover has been reduced by more than 50% since the 1920s. Forests have undergone drastic reduction due to fuel wood and timber extraction and conversion to cropland (Gain 1998; Geisen 2001; Islam 2006). An estimate in 1990 revealed that Bangladesh had less than 0.02 ha per capita forest land, one of the lowest forests-to-population ratios in the world. Throughout the 1980s, introduction of advanced

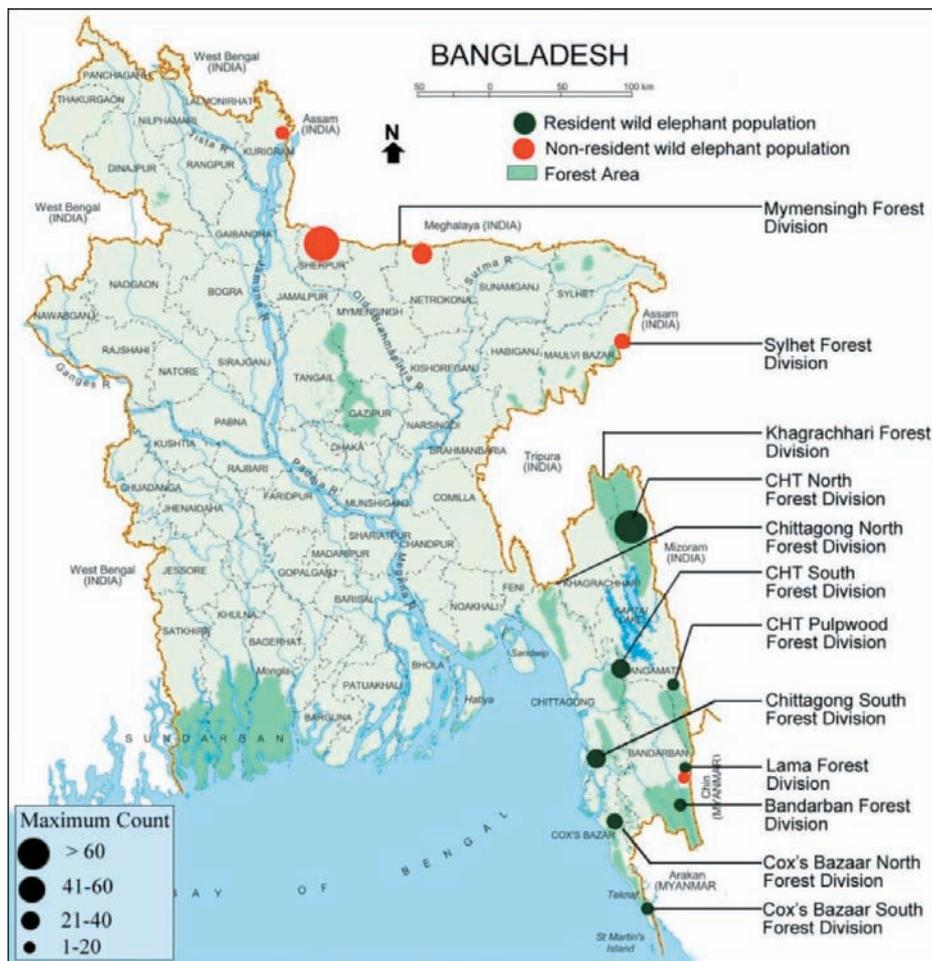


Figure 1. Current distribution of elephants in Bangladesh.



Figure 2. Wild elephant feeding at Fasiakhali Wildlife Sanctuary. Photo by Samiul Mohsanin.

technologies, such as high yield varieties of rice, made it possible to expand crop yields without utilizing more land. This vertical expansion (more crop yield on the same area of land) has almost reached its limit. Consequently horizontal expansion into forests and wetlands is on the increase (Islam 2006).

Crop depredations by elephants are on the increase in Bangladesh, during which people also get injured and killed. In 1997, 21 human and 2 elephant deaths were recorded and the economic loss caused by elephants through feeding and trampling of crops amounted to about US \$ 102,000 in 30 incidents (Islam *et al.* 1999). In 2000, 17 people were killed and 15 injured by elephants. Three elephants were killed by local people in September and November 2001. Newspapers recorded the death of 7 elephants and 47 people from 2006 to 2011 and the Bangladesh Forest Department recorded the death of 37 elephants from 2003-2011 and 73 people from 2008 to 2010.

The main threat to elephants in the northeast is disruption of their migration routes due to development (IUCN 2004). A new threat to trans-boundary elephants is permanent fencing along international borders. Such fences built by India and Myanmar will seriously disrupt the regular movement of elephants between them and Bangladesh. Another threat is monoculture (rubber and acacia) plantations in and around elephant habitats in the Bandarban district by the Forest Department and others. ‘Rohinga’ (refugees from Myanmar) encroachment of

elephant habitats is another long lasting threat in the south-east. Demand for elephant meat and tusks in the south-east also pose a serious threat to elephants.

Management and HEC mitigation

About 2% of the country’s total area has been brought under protection through government initiatives. Teknaf Game Reserve and Chunati Wildlife Sanctuary in the southeast were set up specifically to protect elephants. However, human-elephant conflict (HEC) still occurs within and around protected areas. Protected area management is inadequate due to lack of funds and capacity.

IUCN-Bangladesh has been working in elephant conservation since 2001, establishing baselines, conducting pilot interventions, mapping elephant distribution, HEC areas, elephant corridors and paths, and improving understanding on HEC issues at community and decision-maker levels. WTB in collaboration with ZOO, worked on human-elephant conflict resolution by conducting research and awareness programmes from 2008 to 2009 at Sherpur, Netrokona and Chittagong, and provided training and awareness workshops on human-elephant coexistence (HECx) and translated HECx manual to the local language (Bangla). In May 2004, WTB along with the Bangladesh Forest Department helped Indian foresters to successfully translocate three elephants from Gopalganj district of Bangladesh to India. These elephants came all the way from Jharkhand of India.

In 2010, the Government of Bangladesh approved a compensation scheme for losses caused by elephants with US\$ 1400 for loss of life, US\$ 700 for physical injury and US\$ 350 for loss of livestock, property, plants, trees, crops etc. (MoEF 2010). However, no one has yet got this money due to official formalities.

Captive elephants

The number of captive elephants (Fig. 3) in Bangladesh in 2002-2006 was 94 (Islam 2002, 2006; IUCN 2004). They were mostly used in the

timber industry and circuses. Most were found in Maulvi Bazar district. Of the 94 elephants, 74 were log haulers (of 17 government owned elephants, 13 were log haulers), 17 circus elephants, 3 zoo elephants, and one was owned by Betbunia Police Station, Rangamati. There were 56 females and 38 males, with 57 (27 males and 30 females) under 30 years and 22 (15 males and 7 females) less than 10 years old.

All circus parties are registered with the district commissioner's office. The mahouts and the owners are largely ignorant of the legal status of their elephants and even the necessary diet for a captive elephant. Proper veterinary care is also absent with only the government-owned elephants receiving veterinary care. Some elephants are registered with the local administration although the registration of captive elephants is the jurisdiction of the Bangladesh Forest Department (Islam 2006).

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Figure 3. Elephant in captivity at Dulahazara Safari Park. Photo by Samiul Mohsanin.