

# The Human Dimension of Elephant Conservation in Southeast Bangladesh

## Abstract

Student Name    Shorf uddin Ahmed Chowdhury  
Supervisor        Professor Karl W. Larsen  
Co-supervisor    Associate Professor Robert Hood

The ‘human dimension’ in wildlife management refers to the concepts, behavior and involvement of people involved in the stewardship of wildlife and related resources. It is widely recognized that for the successful conservation of elephants, the human dimension must be forefront and centre in crafting effective management plans and strategies. In Bangladesh, the Asian elephant has been declared “critically endangered” and the population is declining at a quickening rate due to an array of threats, including conflict with human. Crop raiding, damage to houses, fruit gardens and seedlings and other important human values are proximate causes of the human-elephant conflict, resulting in at least 55 elephants and 200 humans being killed since 2003. For my project, I am documenting people’s knowledge of elephants, their interaction with the animal, and their attitude about conservation initiatives and achieving long term co-existence. To accomplish this, I have conducted face-to-face interviews using structured, close-ended questionnaires with 171 respondents across 109 villages located in and near elephant habitat. Although my analyses are in progress, preliminary results suggest that people stance divisive about elephant conservation with 73.1% in favor of elephant conservation. My second objective is to improve our understanding of how the remaining patches of so called ‘elephant habitat’ have been altered as a consequence of human activities on the landscape, decreasing the amount of natural forage for the animals. I have collected Landsat images from the years 1989-2014 and conducted inventory in the remaining elephant habitat to identify (i) land use changes directly affecting elephant habitat and (ii) those patches that appear to be key to the perseverance of these animals. Preliminary results of my study show that the canopy coverage of remaining habitat at present is 31%, at the lower threshold of forest cover (30-40%) needed to minimize human-elephant conflict. A total of 18630 ha of elephant habitat has been converted into human settlements or agricultural land, likely precipitating raid by animals in search of food. The information I have collected on both habitat and human knowledge and attitudes will be used, recognized and incorporated into desperately-needed plans for elephant conservation in Bangladesh.

Key Words: Asian elephant, *Elephas maximus*, human dimension, elephant conservation, human-elephant coexistence, questionnaire survey, satellite imagery, habitat sampling.