

CHAPTER 2: SIGNIFICANCE OF THE STUDY

The dry tropical ecosystems are among the world's most threatened, and the dry deciduous forest of India is being progressively converted to scrub, savannah and grasslands through industrialization, agriculture, fuelwood collection, lopping of trees for fodder and severe grazing/browsing. This habitat destruction threatens the survival of many species (*Sagar & Singh, 2004*).

State of Uttar Pradesh has just 6.88% of its geographical areas as forests which is far below than the national forest cover of India which is 21.24% and the state's share in India's forest area is just 2.12%. Out of total 16, 582 sq.km. of the area recorded as forest area in Uttar Pradesh, 12,071 sq.km is Reserved Forests, 1,157 sq.km is Protected Forests and 3,354 sq.km is unclassified forests. What is interesting is that the largest share of the total forest cover of Uttar Pradesh consists of northern dry mixed deciduous forests (34.94%) which are found in the Vindhyan range mainly in the districts Sonbhadra, Mirzapur, Chandoli and Chitrakoot of the state. In terms of percentage of geographical area under forest cover, Sonbhadra (37.48%), Chandauli (22.20%), Mirzapur (19.18%) and Chitrakoot (18.56%) ranks highest among the 68 districts of Uttar Pradesh (*Forest Survey of India, 2015*).

The Vindhyan highlands have been known as 'Sonaghati' (golden valley) due to the richness of the natural resources and natural indigenous herbs (*Singh et al. 2002*). These forests found in this districts where old sal trees are found are of great significance for the state and the nation. But, what ail these regions are the over-dependence on livestock due to low soil quality and limited rainfall to support agriculture; expansion of agricultural fields into the forests due to availability of fertile nutrient rich soil and water sources, and to a great extent due to the availability of economically important natural resources found in this region like coal, Kaimur sandstone, laterite, granite, limestone etc. Also, due to limited income sources, local people are traditionally dependent on forest produce and sandstone mining for their livelihood which has degraded many forest areas. Due to the dry deciduous in nature, these forests once disturbed are dominated by *Acacia* and *Zizyphus* and are often categorised as wasteland, fallow land, *jhari van* or even as barren in local revenue records. Since the beginning of 20th century, these dry deciduous forests are facing huge threat of land conversion. Mirzapur is the most affected district because of its location which is heart of three distinct economic centres-Allahabad, Varanasi and Robertsganj with well-developed highways and railway connectivity. The district also lies equidistant from New Delhi and Kolkata railway line. It was once a major port on River Ganges few decades ago which is set to be revived by the National Waterways-1 project of Indian government. Due to all these external factors, Mirzapur is facing a huge push for development. The rates of land are not only low but available in plenty in the district. As the Mirzapur town is already congested to allow any new development, the areas which are near the forest areas are eyed by real estate developers.

A number of universities (already functional 2700 acres of BHU South campus and proposed Mulayam Singh Yadav University), townships (Shine City, Mountain city, Wyndham Hill City etc.), religious settlements (*ashrams*), thermal power plant (1320 MW, 875 acres in Dadri Khurd) are being planned in and around these forest ranges.

Forest range like Lalganj, Wyndhamfall and Mirzapur are the live examples of how irresponsible and unplanned development activities can destroy a whole forest range. Forest ranges Marihan, Sukrit and Chunar are now facing the same pressure and the process has already started due to their proximity to SH-5 and SH-5A.

Saying all these, legal protection of forests from conversion of land use can never be achieved until we outline the significance of these forests. We have been observing the developmental paradigm of these forest ranges since past 5-6 years and we realized that the ignorance of the authority cannot be blamed only to the corruption and political pressure, though they are very important drivers in the loss of forest areas. But, what we realized is lacking from every level of governance and development planning of this district is lack of knowledge of wildlife and biodiversity which is unique to this landscape. It is due to this knowledge gap and lack of any reliable documentation, many of the important wildlife areas, corridors and areas essential for survival of fauna are diverted for other developmental purposes. This study is the first attempt to outline the areas of importance for wildlife survival in district Mirzapur. Sloth bears are majestic big mammal which is unique of all bear species due to its habits, agility to adapt in highly stress conditions and relatively lesser home range. For eg., they are the only bear species which is adapted to eating ants and termites and they never hibernate. It is also endemic to Indian subcontinent and shares same protection status as tigers in India-Schedule I under Wildlife Protection Act, 1972. IUCN Red List categorized Sloth Bear as 'Vulnerable', which means they are facing a high risk of extinction in the wild. Sloth bears are primarily found in deciduous forests and are adapted to live in semi-arid conditions and scrublands. Sloth Bears are flagship species in Mirzapur which can help indicate the overall health of the forests and ecosystem. Therefore, for the unique landscape found in Mirzapur, the protection of the unique sloth bear will ensure protection of entire forest community and healthy ecosystem. Due to rapid degradation of forests, encroachment of scrublands and conversion of land for other developmental purposes, the remnant forests are the only breeding and feeding ground of sloth bears in Mirzapur. Until or unless we collect reliable scientific evidences of the presence of sloth bears and protect their habitat and corridor paths, the threat of extinction of sloth bear from Mirzapur is inevitable. Therefore, this study is highly significant given the fact that it is also the first wildlife study being done in Mirzapur. We hope that this study in itself will speak of the significance of the forests of Mirzapur for wildlife.