Chapter 3

THE STUDY AREA

Northeast India represents the transition zone between the Indian, Indo-Malayan and Indo-Chinese biogeographic regions and a meeting place of the Himalayan Mountains and Peninsular India. Northeast India is blessed with a wide range of physiographic and ecoclimatic conditions. The State of Assam has extensive flood plains, while Kanchanjunga in Sikkim stands 8586 m. tall. The state of Assam is one of the richest biodiversity zones in the world. With a sub-tropical climate and heavy rainfall and high humidity, Assam is home to numerous and valuable wildlife and plant species. Kokrajhar is one of the 23 districts of Assam, exhibiting a rich biodiversity. The district of Kokrajhar clings to the northern bank of river Brahmaputra. The Champamati, the Gaurang, the Tipkai and the Sankosh meander through the lush green landscape to make the district.

Nature’s treasure trove 55% of the total geographical area of the district is under reserved forest range cover which includes the Guma Range of Dhubri Forest Division and the Aie Valley Forest Division of Bongaigaon. Chakrasila Wildlife Sanctuary is one of the rarest places to have the endangered Golden Langur.

The district of Kokrajhar with its alluring topography, favourable climatic conditions, rich vegetations, wetlands and riversides forms a suitable habitat to various herpetofaunal species.

Herpetofauna forms an important component of the Northeastern biodiversity and the district of Kokrajhar with its suitable climate and habitat is the home to Varanid diversity. However due to dearth of scientific and proper evaluation information, the distribution of this endangered species and its conservation status has not yet been scientifically determined. Information is limited however, the occasional occurrence of Varanus in the market for selling as well as in some villages indicates that some species of Varanus which is locally called as “Mouphu” are present in the area.
3.1 Geography:

The district of Kokrajhar is located on the north bank of the river Brahmaputra and has a total area of 3,169.22 sq. km. The coordinates of the district lies roughly between 89.46° E to 90.38° E longitudes and 26.19” N to 26.54” N latitudes. The Himalayan kingdom of Bhutan bounds the district on the north, Dhubri district on the south, Bongaigaon district on the east and the Indian state of West Bengal on the west. The Bhutan hills are also the source of a number of rivers that flow through the district and act as tributaries of the mighty Brahmaputra that flows from east to west far from the southern boundary of Kokrajhar district. The important rivers of the district that flow from north to south are the Champamati, the Gaurang, the Tipkai and the Sonkosh. There are other rivulets like the Bhur and the colourfully named Laopani. All the rivers and rivulets flowing through the district have their origin in the Bhutan hills.

3.2 Climate & Rainfall

The district is situated in a humid sub-tropical climate, which is the characteristic of the lower Brahmaputra Valley of Assam. There is high rainfall and humidity. The average summer temperature ranges from 27.64°C to 31.6°C and winter average temperature temperature of 19.34°C to 23.66°C. The average rainfall recorded is 2400 mm to 3000mm.

Fig 3.1 Graph representing average maximum and minimum temperature of Kokrajhar district
3.3 Soil

The soil throughout the district is composed of sand and clay in varying proportion ranging from pure sand in the riverbed to soft clay in different parts. The rocks found in the district are all sedimentary. In the southernmost part of district there are two small hills that are composed of metamorphic rocks. These two hills are called the Dholmar N.C. Hills and Nadanggiri Hills. The soil in the district is fertile and suitable for paddy cultivation. The water that flows along natural *dong* and canals are the main source of irrigation for the agricultural fields.

3.4 Forest

The district has the largest concentration of forest in the state. Forest is one of the most prominent features of Kokrajhar district. Rain water flows down from the hill tracts of Bhutan, along the foothills and reserve forests of the district and nourishes them.

The present estimated area under reserved forests is roughly 1,719 sq. km. that include parts of Aie Valley Forest Division of Bongaigaon district and Guma Range of Dhubri Forest Division. The two forest divisions that fall completely under Kokrajhar district are Haltugaon and Kachugaon. Though records show that about
55% of the total geographical area of the district is under reserved forest, the actual position has dwindled to some extent due to relentless felling of trees by unscrupulous elements and encroachment of reserved forest.

But the Forest Department with the active help of the District Administration is trying its best to protect the forests of the district. There are three other overlapping forest divisions in the district for specific purposes, viz., Social Forestry Division, Working Plan Division and Wildlife Division. A portion of the Chakrasila Wildlife Sanctuary also falls in Kokrajhar district. This sanctuary is dedicated to one of the rarest primates, the golden langur, which is now endemic to Kokrajhar.
Map 3.1 Map: District of Kokrajhar