



# MANAS WILDLIFE SANCTUARY

Summary of Report submitted by the Forest Dept. of Assam

Formerly the rhinos of Manas formed part of the population occupying higher reaches of the valley extending west through Manas R.F., Chirang R.F., Ripu R.F. to Buxa R.F. and Jaldapara WL Sanctuary, West Bengal, but were pushed out by human settlements and cultivations. This distribution broke up into small fragments over the years and now there is no link since 1962. Manas was elevated to the status of National Park in 1990 after passing through several stages of reserved forest and sanctuary. Forestry operations to exploit timber were carried during the 40's and 50's but were stopped entirely in 1964 since which time the area has been fully dedicated for wildlife conservation.

Manas is located in a lower strip at the foot of Bhutan Himalayas in a linear strip extending east-west and falling partly under civil district of Barpeta and Kokrajhar. Manas extends over an area of 500 sq. km from Alabar River in the east up to Sukanjan river in the west. Northern boundary between India and Bhutan and southern boundary is formed by artificially demarkated line of forest road. Extended area includes Panbari, Kahlitama, Koklibara R.F.

The N.P. has an ideal surrounding with only one boundary being occupied by populated villages. Continuous reserve forest belts extend from both eastern and western boundaries. Manas WL Sanctuary of Bhutan forms the northern boundary. The two P.A.s together constitute ecosystem of hills and plains with the international boundary not being recognised by the animals. One negative point is the one village of 2000 people on the eastern side which would be very difficult to shift. In addition to the village there is a GOI agricultural seed farm right inside the sanctuary which has not been shifted despite talks of same since 1974.

Manas has a moist tropical climate with mean maximum summer temperature of 37°C and winter of 11°C. Rainfall is distributed throughout the year with December and January being the driest months and June and July the wettest. Relative humidity is high throughout the year.

The park is traversed by numerous rivers and streams originating in Bhutan Hills and flowing South. In addition there are many smaller nullahs which provide water sources to animals. The river Manas is the largest and during rains it branches to many channels which flood the sanctuary along its banks. Water from other streams, although great in quantity, goes underground and disappears in the Bhabar. This influences distribution and seasonal movement of animals. Ground water table is very low in Bhabar area comparatively speaking and as a result there is scarcity of water in many places within the Sanctuary. There are also areas having near swampy conditions, which are favourite abodes of rhinos.

Floods of the typical Brahmaputra basin variety do not occur in Manas but destructive floods following heavy rainfall do occur causing erosion and disruption of communications. Fire is used as a management tool with controlled burning carried out in a systematic manner but not including the forested areas and swamps.

Geologically the area is a Shiwalik forest with sedimentary rocks, bedded sand stone and grey to green clay stones. Soil formation is from Himalayan wash brought down by streams and rivers. Soil formation is varied but fertile in much of the P.A. with supporting grasses of different species intermixed with tree growths which are of utmost importance for wildlife.

Flora: forest types are Sub-Himalayan high alluvial semi-evergreen forests, East Himalayan moist mixed deciduous forests and low alluvial savannah woodland in three categories, viz. open grassland areas (60%), woodlands and riverine areas. A variety of tree and grass species flourish in these three areas.

Manas supports a tremendous variety of fauna. There are over 20 species of endangered animals listed in Schedule I of the Wildlife Act. Endemic species such as Golden langur and Pygmy hog are found here and nowhere else. More than 320 species of birds including the Florican and three species of hornbills have been recorded. Mammals include five species of primates, nine species of cats, four of civets, five deer, as well as the Indian rhino, water buffalo, gaur, dhole, hispid hare, and others. An area covering 2,837 sq. kms was brought under 'Project Tiger' in 1974 which is now known as Manas Tiger Reserve. Census of tiger and elephant have been carried but not other animals.

The exact size of the rhino population in Manas is not known but authorities estimate that there are approximately 85-90 rhinos in Manas. Ideal habitat for rhino is limited in Manas compared to its extent and are confined to particular areas.

Poaching is gradually going up in Manas despite being one of the most well-fortified protected areas. The agitation which has been going on has disturbed the protection measures which had been built up so systematically. Six forest personnel engaged in protection duty have been killed by extremists and constructions of establishment and camps have been burnt.

Manas is facing a grave situation with scores of animals being killed and smuggled out of the Park as a result of the political situation. If the present trend continues Manas will lose its status. The entire area of Manas has been proposed as a Biosphere Reserve. It is necessary to launch a massive programme of reconstruction both of material and morale with a simultaneous effort to build up the anti-poaching machinery as well as restore the buildings and bridges.