PAKKE TIGER RESERVE

Pakke Tiger Reserve is located in the East Kameng district of Arunachal Pradesh. It is surrounded by the Tenga Reserve Forest to the North, Doimara Reserve Forest on the West, Nameri National Park and Tiger Reserve (Assam) on the South and some agricultural land as well as Papum Reserve Forest on the East. The landscape has high species diversity and endemicity as it forms the transition zone between the Indian and Malayan eco-regions. The two important parts of the North-East Indian tiger landscape are the Brahmaputra flood plains and the North-East Indian hills.

Pakke and Nameri Tiger Reserves are situated North of the river Brahmaputra in the transition zone between the Assam plains and the hilly forests of Arunachal Pradesh. Together, they form one of the largest blocks of semi-evergreen and evergreen forests in the North-East. They are extremely important in maintaining contiguity within the North-East Indian forests and are centrally located within the Western Assam and Arunachal forests. On the West, they are connected with Sonai-Rupai Wildlife Sanctuary through Sessa Orchid Wildlife Sanctuary and Eaglenest Wildlife sanctuary, on the South with Kaziranga Tiger Reserve and Karbi-Anglong hills, and towards the North, they are contiguous with Tale valley and Lower Subansiri forests, which are contiguous with East – Siang and further into Namdapha Tiger Reserve in Changlang district in eastern Arunachal Pradesh.

Area of the tiger reserve

Core/critical tiger habitat : 861.95 Sq. Km
Buffer/Peripheral area : 515.00 Sq. Km.
Total : 1276.95 Sq. Km

Location

Latitudes : 27^0 01’ 05’’ N to 27^0 11’ 05’’ N
Longitudes : 92^0 39’ 05’’ E to 92^0 44’ 20’’ E 2

Habitat Attributes

Flora :

The main vegetation type of the entire tract is Assam Valley tropical semi-evergreen forest. At places, evergreen and semi-evergreen vegetation types merge. The forests are multi-storied and rich

in epiphytic flora and woody lianas. The vegetation is dense, with a high diversity and density of woody lianas and climbers. The forest has a typical layered structure and the major emergent species are *Tetrameles nudiflora, Ailanthus grandis* and *Altingia excelsa*. The forest types include tropical semi-evergreen forests along the lower plains and foothills dominated by *Polyalthia simiarum, Pterospermum acerifolium, Sterculia alata, Stereospermum chelonioides*, *Ailanthus grandis* and *Duabanga grandiflor*. The tropical semi-evergreen forests are scattered along the lower plains and foothills, dominated by *Altingia excelsa*, *Mesua ferrea*, *Dysoxylum binectariferum*, *Beilschmiedia* sp. and other middle storey trees belonging to the Lauraceae and Myrtaceae.

Subtropical broadleaved forests of the Fagaceae and Lauraceae dominate the hilltops and higher reaches. Hill slopes here are dominated by *Mesua ferrea* and *Castanopsis* spp. Moist areas near streams have a profuse growth of bamboo, cane and palms. About eight species of bamboo occur in the area. Seven commercially important cane species grow in moist areas, along with *Livistona jenkinsiana*. Along the larger perennial streams, there are shingle beds with patches of tall grassland, which give way to lowland moist forests with *Dillenia indica* and *Talauma hodgsonii*. Along the larger rivers, isolated trees of *Bombax ceiba* and two species of *Albizzia* are common.

Fauna

The faunal diversity is immense and around 59 mammal species have been recorded so far out of which 16 threatened species (6 endangered and 10 vulnerable). Tiger and Elephant are the charismatic mammals, besides a large array of co-predators like Leopard, Clouded leopard, Wild dog, Himalayan Black bear and many more small carnivores, ungulates like Gaur, Sambar, barking deer, wild boar and other species. 296 birds species have been documented, 31 species of amphibians and 30 species of fishes have been recorded.

Tiger Status

A report on the status of tigers, co-predators and prey in India done in 2010 by the Wildlife Institute of India shows that there are 9 tigers shared by Pakke and Nameri.

Core

In the core area, wildlife protection and management are given priority. The Forest Department provides livelihood alternatives and eco-development activities in the buffer in order to wean people away from depending on resources in the core.

Buffer

The buffer area has been classified into two zones:

1. Eco Development Zone which consists of human settlement areas, agriculture land, horticulture, fisheries and jhum land. The eco-development activities are implemented through participatory

village level micro plans for reducing resource dependency of people living around the park. The local community ensures reciprocal commitment through respective eco-development committee. Rural development activities shall be integrated with wildlife conservation concerns.

2. The Forested zone consists of the Reserve Forests and other unclassified state forests away from the human settlement. This zone is protected with the participation of local people. Collection of timber and NTFP are regulated.

3. Human-wildlife conflict is mitigated by ensuring timely payment of ex-gratia for loss of life, livestock and crop depredation.

Corridor

The Seijosa nala and Dibru nala corridors in the Eastern part of PTR connecting with Papum RF have been partially disturbed due to human settlement and agriculture land development. There is serious human-animal conflict due to crop depredation and damage of dwelling houses over the area. This corridor can be restored by voluntary relocation of the 2 villages (Langka and Jolly) and providing them with alternate suitable land. The Tipi and Elephant Flat corridors in the Western part of PTR connecting Doimara RF, Eagle Nest Wildlife Sanctuary and Sessa Orchid Sanctuary has been almost lost due to human settlements and the construction of 24 km Pinjuli-Kimi road by NEEPCO Ltd. which is beyond restoration. The proposed additional buffer at Doimara RF seeks to maintain the Dezeling corridor.

In case of the corridors mentioned above, if the resident community is not agreeable to voluntary relocation, the agricultural practices and sale of agricultural land resulting in a change of land use patterns will be monitored so that the corridor values are not affected.

Managerial issues

Monitoring of Tiger source population in Pakke and surrounding divisions is an important issue. The Phase-IV monitoring in Pakke needs to be mainstreamed in the adjoining divisions with creation of camera trap tiger ID data base with periodic tallying. The other important issues are intelligence gathering and anti-poaching operations, voluntary relocation of villages, cattle immunization, organizing awareness and education tour, restorative inputs for identified corridor connectivity, regulation of tourism as per guidelines issued by NTCA, weed eradication, ex-gratia /compensation for depredation due to wild animals. Coordination with the adjoining state of Assam and forest divisions within the state for keeping track of moving tigers is also required.

Good Practices

Phase-IV monitoring and creation of camera trap photo ID database of tigers, formation of Ghora-aabhe SHGs comprising of 11 nos. gaon burahs (Village head) of fringe villages and 17 nos. Women SHGs who were imparted training, cooperated with the forest department for conservation of wildlife in and around Pakke resulting in seizure of 56 country made guns, steel traps, poisons and bow arrows used for killing of wild animals.