### SUNDARBAN TIGER RESERVE

Sundarbans Tiger Reserve (STR) is situated in the coastal districts of West Bengal, *i.e.* South 24-Parganas and part in North 24-Parganas (Arbesi Block only). It lies at the southern-most extremity of the lower Gangetic delta bordering the Bay of Bengal. The Sundarbans can be described as a maze of estuaries, river channels, and creeks encompassing a number (105) of islands of various shapes and sizes. It is the only mangrove forest throughout the world (besides Bangladesh) to harbour significant tiger population. Apart from the tiger, the Sundarban Tiger Reserve also has a rich array of biodiversity values, both floral and faunal. The Sundarbans Tiger Reserve is bound on the east by the international boundary with Bangladesh formed by the rivers Harinbhanga, Raimangal and Kalindi. On the south lies the Bay of Bengal. The western border is formed by the river Matla, which acts as a common boundary with the territorial Forest Division of South 24-Parganas. Towards the north-west, the area is bound by rivers Bidya and Gomdi.

# **Area of the Tiger Reserve**

Core/Critical Tiger Habitat: 1699.62 sq km

Buffer Area : 885.27 Total Area : 2584.89

### Location

Latitude  $21^{0}31$ ¢ to  $22^{0}31$ ¢ N Longitude  $88^{0}10$ ¢ to  $89^{0}51$ ¢ E

### **Habitat Attributes**

#### **Flora**

There are 140 plant species under 59 families and 101 genera which have been reported from the entire Biosphere region. These comprise of true mangroves or major elements, minor elements of mangroves or/and mangrove associates, shrubs, non-halophytic non-mangrove associates, halophytic herbs, shrubs, weeds and epiphytes and parasitic plants

#### **Fauna**

The Tiger Reserve is home to a large number of endangered and globally threatened species like the tiger (*Panthera tigris tigris*), fishing cat (*Felis viverrina*), estuarine crocodile (*Crocodilus porosus*), Gangetic dolphin (*Platanista gangetica*), and Irrawady Dolphin (*Oracella brevirostris*), king cobra (*Ophiophagus hannah*), water monitor lizard (*Varanus salvator*) and other species. It harbours significant populations of the river terrapin (*Batagur baska*), which was once believed to be extinct. It is the nesting ground for marine turtles like Olive Ridley (*Lepidochelys olivacea*), Green sea turtle (*Chelonia mydas*) and Hawksbill turtle (*Eretmochelys imbricata*). The mangroves serve as nurseries to shell fish and fin-fishes and sustain the coastal fisheries of the entire eastern coast.

A close network of rivers, channels and creeks intersect the whole area, which has resulted in formation of innumerable islands. Wildlife of the mangrove forests helps in maintaining ecological balance as the plants and animals are directly interdependent on each other. The tiger on the land and crocodiles in the water are two top consumers in this eco-system. The birds, mammals, reptiles, fishes and micro organisms associated with the mangroves represent the characteristics of this estuarine habitat.

# **Tiger Status**

As per the latest estimation based on Camera Trapping, the minimum number of tigers in Sundarban Tiger Reserve is 79. There are 3 Ranges outside Sundarban Tiger reserve which also have tiger presence (around 24). As per the guidelines of NTCA these areas need to be included in the tiger reserve for better management and monitoring of tigers.

#### Core

The core area extends up to 1699.62 sq.km. and is devoid of any human settlement. Illegal fishing is the only anthropogenic pressure in the core. Out of 80 camera trapped tigers, 50 tigers have been camera trapped in the core. Apart from fishes and crabs the major prey base are spotted deer and wild boar.

### **Buffer**

The buffer extends up to 885.27 sq km. and is surrounded by 48 interfacing islands of different shapes and sizes having human habitations. Due to difficult terrain intermingled with meshwork of creeks, channel and rivulets, anthropogenic pressure is less in the area. Both tourism and fishing are allowed in the buffer in a controlled manner. 30 tigers have been camera trapped in the buffer area.

### Corridor

The entire Sundarban Tiger Reserve is connected by a mesh work of innumerable creeks, channels, rivulets and tigers are often found swimming across 50m-70m wide water channels. In the west, the river Matla acts as an interdivisional corridor and on the eastern side, the river Raimangal acts as an international corridor as far as tiger movements are concerned. Though rare, there are occasional

reports of tigers swimming across these big rivers.

## **Managerial Issues**

The unique landscape of Sundarban makes the protection aspect extremely important. Further, the fringe villagers are traditionally dependent on Sundarban for their livelihoods, fishing is the major source of income to a majority of fringe villagers. Seasonal honey collection is another major livelihood activity. Human tiger conflicts are common. Ecodevelopment activities, have a positive impact and are useful to address the interface.

### **Good Practices**

Patrolling has been intensified near the international boundary. The JFMCs have been activated and ecotourism, in an environment friendly manner, is being promoted as per the prescriptions laid out in the approved TCP.