



## **NATIONAL TIGER CONSERVATION AUTHORITY / PROJECT TIGER**

Statutory Body under the Ministry of Environment, Forests and Climate Change  
(Government of India)

### **KALAKAD MUNDANTHURAI TIGER RESERVE**

The Kalakad Mundanthurai Tiger Reserve of Tamil Nadu is in the South Western Ghats forms part of the interstate Agasthyamalai Biosphere Reserve. It includes three sanctuaries, viz. Kalakad, Mundanthurai and part of Kanyakumari Sanctuary, with portions of Tirunelveli forest division of the State. As many as fourteen rivers originate from this reserve, which feed numerous tanks in the plains. There are eleven dams in and around the reserve with three hydroelectric power stations. The terrain is undulating with several valleys and porous rocks.

#### **Area of the Tiger Reserve**

Core/Critical tiger habitat	: 895.000 sq.km
Buffer/Peripheral area	: 706.542 sq.km
<b>Total</b>	<b>: 1601.542 sq.km</b>

#### **Location**

Latitudes	: Between 8°.25' N and 8°.53'N
Longitudes	: Between 77°.10' E and 77°.35' E

#### **Habitat Attributes**

##### **Flora**

The vegetation of the reserve varies from thorny shrub jungle to lush evergreen forests. As many as 448 endemic species of angiosperms have been identified alongwith 161 fern species. The forests are categorized as below:

1. West Coast tropical evergreen forests
2. Southern dry mixed deciduous forests
3. Ochlandra Reed Brakes
4. Tropical riparian fringing forests
5. Dry teak forests
6. Southern moist mixed deciduous forests
7. Southern montane wet grass land
8. Southern hilltop evergreen forests
9. Carnatic umbrella thorn forests
10. Tirunelveli Semi evergreen forests
11. Grass lands.

## Fauna

The faunal diversity is tremendous and around 84 threatened species have been reported (4 critical, 24 endangered and 56 vulnerable). Tiger and elephant are the charismatic mammals, besides a large array of co-predators (leopard, small carnivores), ungulates (sambar, spotted deer), birds, reptiles (crocodile) and fishes.

In addition to forests, savannah woodlands and grasslands, there are tea and coffee plantations within the reserve. The aquatic habitat include reservoirs and rivers, which support flora, water birds, amphibians and fishes. The habitat also has old plantations of Teak, Eucalyptus and other miscellaneous species. The Mundanthurai plateau and Nambi Kovil forest areas have been identified as a Medicinal Plant conservation area as well.

## Tiger Status

The reserve has a comparatively low tiger status and the 2010 country level tiger assessment has estimated around 15-18 tigers. The adjoining forest divisions, viz. Tirunelveli and Kanyakumari, also support resident tigers.

## Core Zone

The core area has large number of water bodies (23 sq.km.) and rocky outcrop (20 sq.km.). As many as five hill tribe settlements exist within the habitat (Kani), apart from fourteen enclaves (four religious, nine private and one a revenue village). Day to day protection, monitoring of tiger, reducing biotic disturbance and securing inviolate space for tiger are important thrust areas.

## Buffer Zone

The buffer area is a 5 km. belt of revenue villages and hamlets, extending along the Eastern boundary of the reserve, with areas from adjacent forest divisions of Tirunelveli and Kanyakumari. An area of 706.542 sq.km is covered under this zone. The reserve has considerable human and cattle population owing to the presence of many villages and townships. Hence, there is resources dependency on the forests of the reserve.

To relieve the biotic pressure and address the human-wildlife interface, an ecodevelopment project was launched in 1994, which is successfully ongoing and serving as a role model.

## Corridor

The Kalakad Mundanthurai Tiger Reserve, alongwith the Periyar Tiger Reserve of Kerala constitute the southernmost tiger ranges of the Western Ghats in South India. Thus, they are high priority areas for global biodiversity conservation effort. There are two landscapes with protected areas, viz. Periyar (consisting of Periyar Tiger Reserve of Kerala and Srivilliputhur Wildlife Sanctuary of Tamil Nadu) to the North, and Agasthiyarmalai (consisting of Kalakad Mundanthurai Tiger Reserve and Shendurney, Peppara and Neyyar Wildlife Sanctuaries of Kerala) to the South. Once contiguous, they are now separated by the Shencottah gap (450 sq.km.), with a mosaic of degraded forests, plantations and human settlements. The three major linear barriers in this region are

National Highways, the Punalur - Shencottah Railway line and 400 KV power line, which inhibit large mammal movement, while serving as focal areas for human activity.

The corridor connecting Kalakad and Mundanthurai is known as the "One mile width Corridor". Running from East to West, this is situated between Manjolai Tea division and Kakkachi Tea division of Bombay Burma Trading Corporation.

## **Managerial Issues**

Stepping up field protection, day to day monitoring of tigers and wild animals, securing inviolate space for tiger, surveillance over enclaves/estates, ecodevelopment in the buffer and retrofitting measures for heavily used infrastructure within the reserve are thrust areas.

## **Good Practices**

Innovative ecodevelopment in peripheral areas to elicit local support for conservation.