

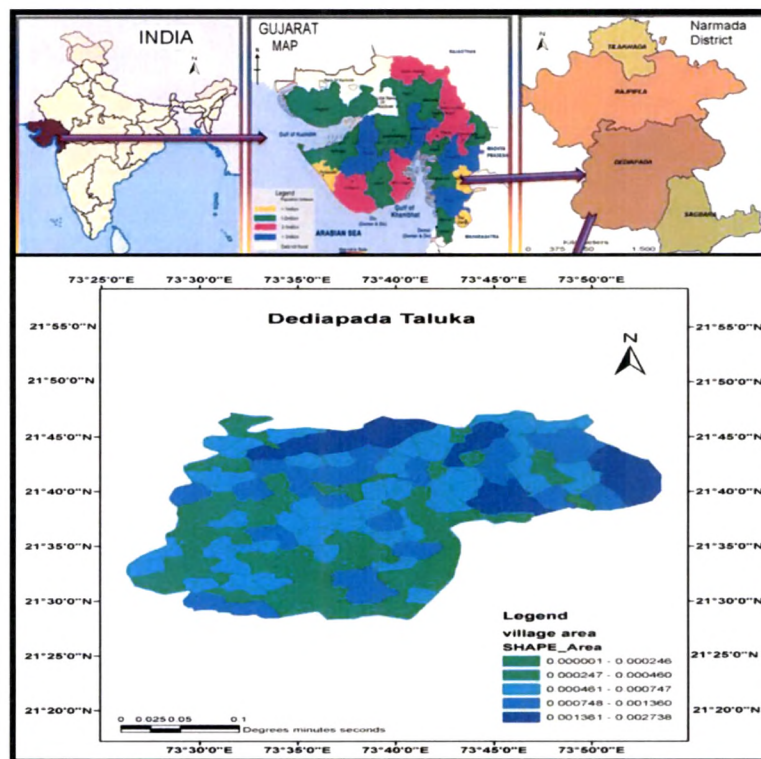
**STUDY AREA**

## Study area

### 7.0. Description of the Study Area

#### 7.1. Geographical area:

The Shoolpaneshwar forests in south Gujarat are remnants of some of the finest forests in the Gujarat. The Dediapada forests are part of the Shoolpaneshwar forest. They are home to a variety of natural resources and a diversity of flora and fauna. This place is situated in Narmada district, Gujarat, India, its geographical coordinates are **73°41'6" E**, **21° 45' 43"N** and its original name (with diacritics) is Dediapad.



**Plate -3: Study Area –Dediapada Taluka of Narmada District**

#### 7.2. History:

Rajpipla forests were managed by the erstwhile Rajpipla State up to independence. The present Dediapada Taluka was part of this State. The forests were managed on scientific lines and regular working plans were prepared. Most part of the sanctuary, which was the part of the Rajpipla State, was left unworked except for small amount of work plans prepared for yield.

After independence, the forests were managed by the Forest Department of the erstwhile Bombay state. After reorganization of states and formation of Gujarat state, Rajpipla

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Division came under the Surat conservancy. In 1972 the division was bifurcated and the areas of the present sanctuary came under Rajpipla East Division. The sanctuary was established in 1982, when it was known as *Dumkhal Sloth Bear Sanctuary*. In later Notifications made in 1987 and 1989, the area of the sanctuary was enlarged and after final notification, it came to be known as *Shoolpaneshwar Wildlife Sanctuary*. (Plate-4)



**Plate 4:Shoolpaneshwar Sanctuary -Dhumkal Range**

The Dediapada forest, consisting the Shoolpaneshwar sanctuary has 75% of the area under bamboo, which is a big fire hazard during the summer season. Fire and repeated fires causes extensive damage to the area, besides affecting regeneration and disturbing the wildlife. The areas of the Sanctuary, especially those falling on Maharashtra border, are prone to illicit cutting for commercial purposes. Intensive patrolling of these areas is required as they are hilly and rugged. Inside the Sanctuary, the locals for house construction and other requirements resort to the cutting. With the population going up, the illicit cutting for domestic requirement also took up a big toll on the forests.

### **7.3. Resources:**

As per the Champion & Seth's classification, the sanctuary has two distinct forest types viz. Southern Tropical Moist Deciduous Forest, sub type slightly moist teak forests 3B/C1C and Southern Tropical Dry Deciduous Forests, sub type dry teak forests 5A/C1B. The area is generally hilly and rugged with precipitous slopes at most of the places. Dhaman mal hill near Piplod is the highest point in the sanctuary at 880.87 meters.

### **7.4. Geology:**

Geologically the area has formations of Eocene time with bagh beds being the most representative. The Deccan trap, dikes and alluvium deposits are the other formations.



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The soils in this area vary in color, texture, depth and stoniness depending upon the rock and topography. The reddish brown loamy soil, yellowish brown loamy soil, sandy loam, fine murram and black cotton soil are some of the soils found in the sanctuary area.

### 7.5. Climate:

There are three main seasons - Monsoon, which extends from June to October, winter from November to February and summer from March to June. The area receives an annual rainfall of 100 to 125cms. The summers are hot while the winters are pleasant.

### 7.6. Flora and Fauna:

**Flora:** The two Forest types found in the area are not distinctly reflected on topography. The moist teak forests are found in Fulsar, Piplod, and Sagai ranges of the sanctuary. The composition of teak is usually 25% of the total crop. The dry teak forests also occur in the same locality within a short distance but mostly on poor soils, hill ridges and areas subjected to biotic interference. Under storey consisting of *Dendrocalamus strictus*, is a characteristic feature of this area. Ground cover consists of evergreen to semi evergreen species and occurrence of woody climbers is common feature. This area can be categorized into different strata. The top Strata is occupied by the trees, which consist of *Tectona grandis*, *Terminalia cranulata*, *Dalbergia Sissoo*, *Anogeissus latifolia*, *Lannea coromandelica*, *Garuga pinnata*, *Mitragyna parvifolia*, *Lagerstroemia parviflora*, *Diospyros melanoxylon*, *Soymido febrifaga*, *Terminallia bellerica*, *Madhuca indica* and rest other species. (Plate -5,6,7)



Plate 5: Photograph showing Teak forest



Plate 6: Photograph showing Butea forest



Plate 7: *Butea monosperma* flowers

**Fauna:** The forest area has a large bird population with more than 200 species of birds found therein, which includes some of the rare and endangered birds as well. Besides, there is a large number of raptors population which are at the apex of this pyramid.

The mammals which are found in this sanctuary includes leopard, sloth bear hyena (plate-8a), fox, jackal, cats, mongoose besides herbivores like sambar, four horned antelope, wild boar, hares, porcupines and monkeys. The Narmada River harbors a lot of crocodiles. Sometimes even the casual bath in the river is dangerous. Among the reptile species; python, snakes like cobra are also often seen. The chital population has become extinct and a need for a breeding program for the same is felt. The flying squirrel and the giant squirrel are some of the other species, which are found in the area



(a) Leopard

(b) Sloth Bear

(c) Hyena

Plate 8a: Wildlife of Dediapada forest

### 7.7. Non Wood Forest Product (N.W.F. P.)

Ninety percent of the non-wood forest products (NWFP) production in Rajpipla comes from the sanctuary area highlighting the degree of dependence on the sanctuary. The term non-wood forest products cover all forest products other than timber, small wood and firewood. Thus N.W.F.P specifically includes grasses, fruit, leaves, barks, gums, etc.



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besides, plants of medicinal importance. Apart from their monetary value, forest products, are of enormous value to the tribes residing in Shoolpaneshwar sanctuary. However, of the various NWFPs only a few have high economic value viz. *Madhuca indica* flower, *Madhuca* seeds and *Diospyros melanoxylon* leaves. These three contribute 95% of total revenue. Apart from the collection, as per the rights and privileges, the local tribes are entitled to collect the NWFPs for their benefit use. A majority of NWFP production comes from the rich forested areas that are also the best habitat for wildlife. These areas are Geechad, Chopdi, Namgir, Kalwat, Piplod, etc. Thus the area of NWFP production overlaps with areas of rich bio-diversity requiring broad conservation and management strategy.

### 7.8. Tourism:

In these beautiful forest range Ninai waterfalls (plate-8b) and Shoolpaneshwar wildlife sanctuary are present. They become the excellent trekking and camping options, especially after the monsoon season, when the area is more lush.



Plate 8b: Ninai Waterfalls