## 8.1 ANDHRA PRADESH



## 8.1.1 Introduction

Andhra Pradesh is situated at the southeast coast of the country and lies between lat 12°37' and 19°55' N and long 76°45' and 84°46' E. It has a geographic area of 27.51 million ha and constitutes 8.37% of the total area of the country. Physiographically the State can be divided into 3 distinct regions viz. (i) the hilly region having Nallamalai and Erramalai Hills of the Rayalaseema and the Eastern Ghats, (ii) the plateau having an altitude of 100 m to 1000 m spread mainly over the Telengana region and (iii) the deltas of rivers between the Eastern Ghats and the sea coast. The major rivers are Godavari and Krishna, which pass through the Deccan Plateau and drain into the Bay of Bengal. Land use pattern of the State is given in Table 8.1a.

Climate of the State is hot and humid with temperatures ranging from  $15^{\circ}$ C to  $45^{\circ}$ C. Annual rainfall ranges from 1,100 to 1,250 mm in the north, reducing to about 500 mm in the south. The northeastern areas along the coastline are periodically lashed by cyclones.

The total population of the State is 76.21 million (*Census 2001*), which constitutes 7.41% of the country's population. Of this, rural population is 72.70% and urban 27.30%. The population density is 277 persons per km<sup>2</sup>. The Scheduled Tribes constitute 6.6% of the population mainly distributed over 8 districts. The livestock population is 48.2 million (*Livestock Census 2003*), which has increased by about 30% since the census of 1992.

## 8.1.2 Forest Resources

The recorded forest area is 63,821 km<sup>2</sup>, which is 23.20% of the geographic area of the State. By legal status,

Reserved Forests constitute 79.09%, Protected Forests, 19.37%, and Unclassed Forests, 1.54%.

The four major forest types occurring in the State are Tropical Dry Deciduous, Southern Tropical Thorn, Southern Tropical Moist Deciduous and Littoral and Swamp forests. Forests are distributed mainly in the form of a wide strip in the north starting from Nizamabad district in the west to Srikakulam in the east. Besides this, a belt runs from central to the southern part of the State in the Nallamalai hills.

#### 8.1.3 Protected Areas

There are 4 National Parks spread over an area of 0.33 m ha and 21 Wildlife Sanctuaries over 1.25 m ha. Thus a total of 1.58 m ha area constituting 5.76% of the geographical area of the State is under protected area network.

The largest Tiger Reserve of the country, Nagarjunasagar - Srisailam spread over 0.36 million ha and the Kolleru wildlife sanctuary which is a Ramsar site are located in this State.

# 8.1.4 Joint Forest Management

Andhra Pradesh is one of the pioneer State to start Joint Forest Management. There are 8,663 Vana Samarakshana Samithies (VSSs) managing 2.29 million ha of forest area which is about 36% of the forest area of the State. About 1.59 million members are involved in JFM. Out of these, 0.48 million members belong to Scheduled Tribes.

Source: AP Forest Department.

Table 8.1a: Land use pattern

Land Use	Area in '000 ha	Percentage
Total geographical area	27,507	
Reporting area for land utilization	27,440	100.00
Forests	6,199	22.59
Not available for cultivation	4,725	17.22
Permanent pastures and other grazing lands	675	2.46
Land under misc. tree crops & groves	269	0.98
Culturable wasteland	728	2.65
Fallow lands other than current fallows	1,417	5.16
Current Fallows	2,312	8.43
Net area sown	11,115	40.51

Source: Land Use Statistics, Ministry of Agriculture, GOI, 2005.

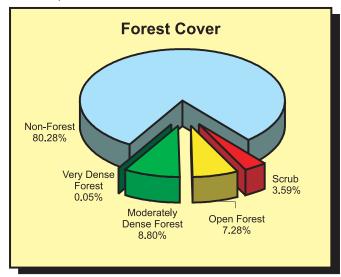
#### 8.1.5 Forest Cover

The forest cover of the State, based on satellite data of October-December 2004, is  $44,\!372~km^2,$  which is 16.13% of the geographic area. Very dense forest is  $130~km^2,$  moderately dense forest,  $24,\!199~km^2,$  and open forest,  $20,\!043~km^2.$  The forest cover of the State is shown in Fig. 8.1.

A decrease of 40 km<sup>2</sup> of forest cover has been assessed in the present assessment as compared to previous assessment (based on satellite data of October-December 2002.)

The change matrix, given in Table 8.1b reveals that there has been a decrease of  $22~\rm{km}^2$  in the moderately dense forest, and  $18~\rm{km}^2$  in open forest.

Based on field verification by the FSI officials and subsequently corroborated by Andhra Forest Department, the loss in forest cover is attributed to the departmental felling (mainly of Eucalyptus) in the districts of Khammam, Chittoor, East Godavari, Medak, Prakasam, Hyderabad, Rangareddy, West Godawari, Visakhapatnam, and Warangal. In addition, there has been illicit felling in some parts of Warangal due to local disturbances (Naxalite activities).



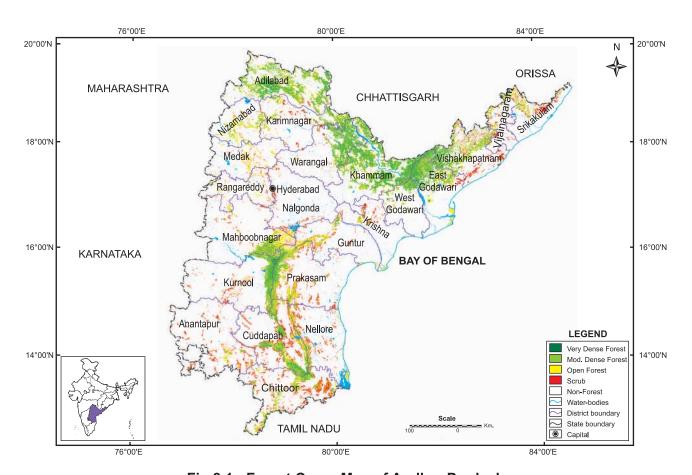


Fig 8.1 : Forest Cover Map of Andhra Pradesh

Table 8.1b: Forest cover change matrix

(area in km2)

(area in km2)

2003 Assessment (Data	2005 Assessment (Data of OctDec. 2004)				Total	
of OctDec. 2002)	VDF	MDF	OF	Scrub	NF	2003
Very Dense Forest	130	0	0	0	0	130
Moderately Dense Forest	0	24,199	0	0	22	24,221
Open Forest	0	0	20,043	0	18	20,061
Scrub	0	0	0	9,862	0	9,862
Non-Forest	0	0	0	0	220,795	220,795
<b>Total 2005</b>	130	24,199	20,043	9,862	220,835	275,069
Net Change	0	-22	-18	0	40	

The district wise details of very dense forest, moderately dense forest, open forest and scrub along with

the changes compared to 2003 assessment, have been provided in Table  $8.1 \, \mathrm{c}$ .

Table 8.1c: District-wise forest cover

Number of Districts: 23

Change **District** 2005 Assessment Percent Scrub Geographic Very Mod. Open **Total** of G.A. area dense dense forest forest forest 16,128 0 139 Adilabad<sup>T</sup> 37 3,640 2,440 6,117 37.93 0 Anantapur 19,130 0 73 337 410 2.14 945 2 -1 Chittoor 15,151 825 1,364 2.191 14.46 1,417 9 -2 East Godawari<sup>T</sup> 10,807 2,327 1,157 3,493 32.32 152 Guntur 11,391 0 197 672 869 7.63 0 381 389 -3 0 353 5.05 255 Hyderabad & Rangareddy 7,710 36 Kadapa 15,359 4 1,864 1,510 3,378 21.99 0 1,325 Karimnagar 11,823 0 864 785 1.649 13.95 0 336 Khammam<sup>T</sup> 16,029 5 5,117 2,048 7,170 44.73 -12 54 Krishna 0 50 200 250 2.86 0 250 8,727 Kurnool 17,658 35 1,433 671 2,139 12.11 0 441 Mahboob Nagar 18,432 20 728 1,203 1,951 10.58 0 310 Medak 9,700 0 40 533 573 5.91 -1 181 Nalgonda 14,240 0 17 136 153 1.07 0 346 Nellore 13,076 0 213 676 889 6.8 0 720 0 Nizamabad 7.956 0 236 894 14.2 1.130 116 Prakasam 17,626 18 1,345 1,735 3,098 17.58 -1 816 Srikakulam<sup>T</sup> 5,837 0 102 319 421 7.21 0 376 Vishakapatnam<sup>T</sup> 0 1,995 1,385 3,380 30.28 -1 826 11,161 VijainagaramT 6.539 0 145 582 727 11.12 0 297 Warangal<sup>T</sup> 12,847 0 2,341 755 3,096 24.1 -6 150 West Godawari<sup>T</sup> 7,742 0 611 288 899 11.61 -13 29 275,069 130 24,199 16.13 -40 **Total** 20,043 44,372 9,862

# 8.1.6 Tree Cover

Tree cover of Andhra Pradesh has been estimated following a sampling based approach. A separate exercise was carried out where high resolution satellite data (5.8m) was used for identification of tree patches for field

inventory. Field inventory has been carried out on 661 sample plots spread over 5 districts of the State between 2002-06 and the estimated tree cover in the State is  $7,640\,\mathrm{km}^2$ .

The forest and tree cover of the State is presented in the Table 8.1d.

Table 8.1d: Forest & tree cover

(area in km²)

Category	Area	% of Geographical Area
Tree Cover	7,640	2.77
Forest Cover	44,372	16.13
Forest & Tree Cover	52,012	18.90