

7.1 ANDHRA PRADESH

7.1.1 Introduction

Andhra Pradesh lies between latitude 12°37' and 19°55' N and longitude 76°45' and 84°46' E. geographical area of the State is 275,069 km² which constitutes 8.37% of the total area of the country. On the eastern side along the Bay of Bengal, the State has a coastline of 974 km. The State has three distinct physiographic 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. Godavari and Krishna are the important rivers of the State which drain into the Bay of Bengal.

Land use pattern of the State is given in Table 7.1.1.

The State has hot and humid climate with temperatures ranging from 15°C to 45°C and the annual rainfall varies 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. Rural population is 72.70% and urban 27.30%; the Scheduled Tribes constitute 6.6% of the population mainly distributed over 8 districts. The population density is 277 persons per km². The

projected population of the State by the Office of RGI, for the year 2009 is 83.18 million. The livestock population is 48.2 million (Livestock Census 2003), which has increased by about 30% since the census of 1992.

7.1.2 Recorded Forest Area

The recorded forest area in the State is 63,814 km², which is 23.20% of the geographical area. Reserved, Protected and Unclassed Forests constitute 95.92%, 3.08% and 1% of the total forest area respectively.

7.1.3 Protected Areas

There are 6 National Parks and 21 Wildlife Sanctuaries covering an area of 0.14 million ha and 1.16 million ha respectively. Thus a total of 1.30 million ha area constituting 4.73% of the geographical area of the State is under protected area network.

Nagarjunasagar Srisailem, the largest Tiger Reserve of the country with an area of 0.36 million ha is located in the State.

7.1.4 Joint Forest Management

Andhra Pradesh is one of the pioneer States to adopt Joint Forest Management. About one third of the forest area of the State i.e. 2.29 million ha is under JFM and being managed by 8,663 Vana Sanrakshana Samities (VSSs). There are 1.59 million members

Table 7.1.1: Land use pattern

Land Use	Area in '000 ha	Percentage
Total geographical area	27,507	
Reporting area for land utilization	27,505	100.00
Forests	6,210	22.58
Not available for cultivation	4,781	17.38
Permanent pastures and other grazing lands	602	2.19
Land under misc. tree crops & groves	320	1.16
Culturable wasteland	695	2.53
Fallow lands other than current fallows	1,583	5.76
Current fallows	3,166	11.51
Net area sown	10,147	36.89

Source: Land Use Statistics, Ministry of Agriculture, GOI, 2006.

involved in JFM which include 0.48 million members belonging to Scheduled Tribes.

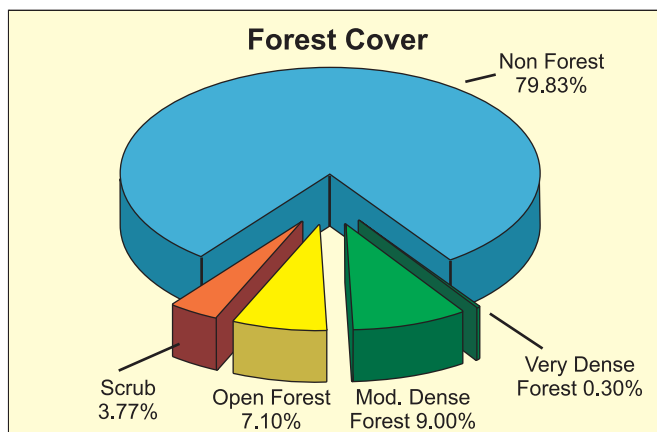
Source: AP Forest Department, 2005.

7.1.5 Forest Cover

The forest cover in the State, based on interpretation of satellite data of Oct 2006-Mar 2007, is 45,102 km², which is 16.40% of the State's geographical area. In terms of forest canopy density classes, the State has 820 km² very dense forest, 24,757 km² moderately dense forest and 19,525 km² open forest. The distribution of forest cover of the State is shown in Fig.7.1.

Comparison of the current forest cover (satellite data of Oct 2006 - Mar 2007) with that of previous assessment (satellite data of Oct - Dec 2004) shows a loss of 129 km² of forest cover.

The change matrix, given in Table 7.1.2 reveals that there has been a decrease of 48 km² of moderately



dense forest and 81 km² of open forest.

On the basis of ground truthing by the officials of FSI and the information gathered from the State Forest Department, main reasons for the increase in forest cover in the district Prakasam is attributed to plantation and protection of degraded forest whereas the reasons for decrease in forest cover in the districts of Adilabad, Karimnagar, Khammam and Warangal

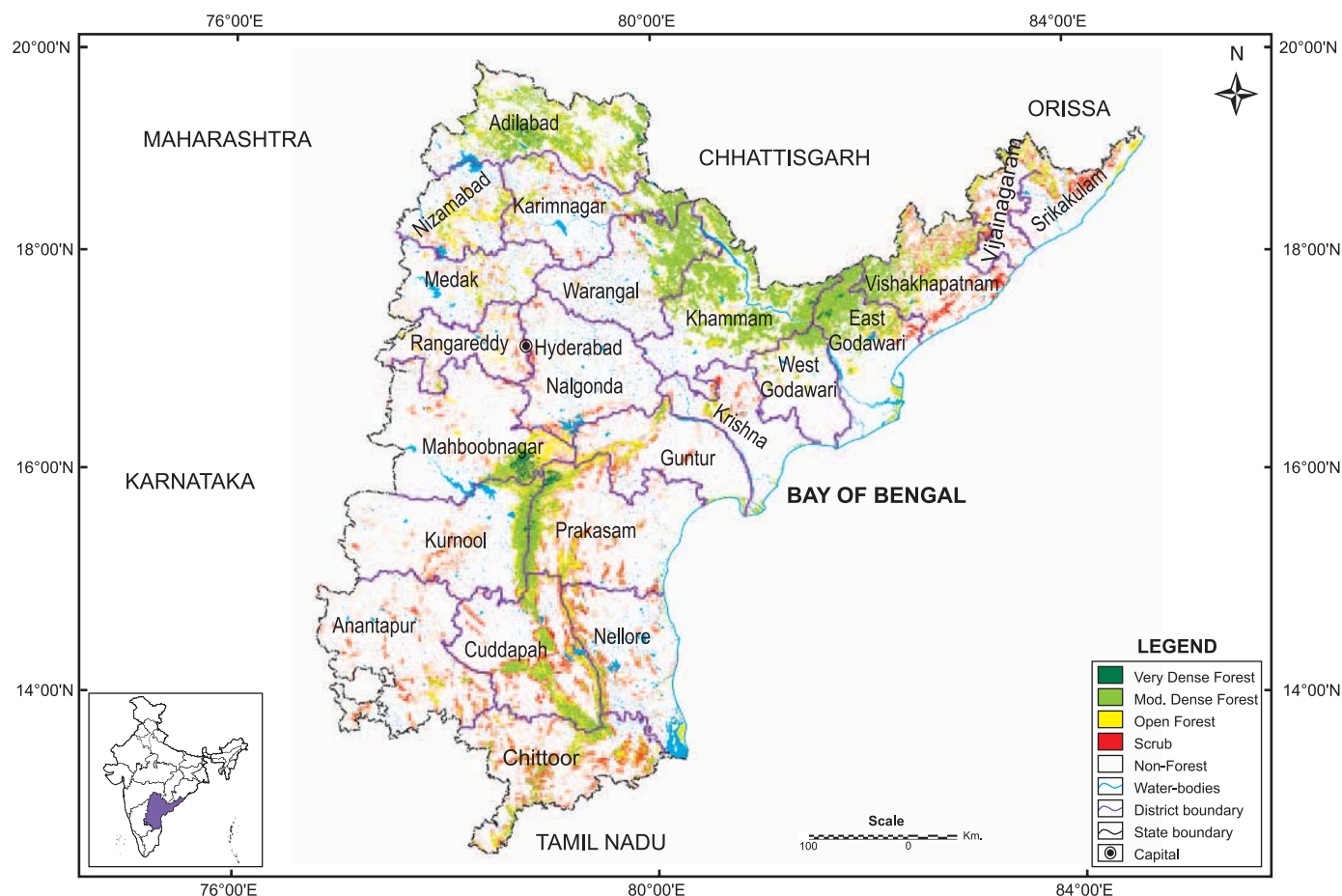


Fig 7.1 : Forest cover map of Andhra Pradesh

are due to rotational/clear felling of mature Eucalyptus plantation raised by the Department. Forest land has been transferred to user agencies in the districts of Adilabad and Khammam. In addition, there has been encroachment in Adilabad, Khammam and Warangal

due to local disturbance.

District wise forest cover in different canopy density classes and scrub along with the changes compared to 2005 assessment is given in the Table 7.1.3.

Table 7.1.2: Forest cover change matrix

(area in km²)

2005 Assessment (Data of Oct-Dec 2004)	2007 (Data of Oct 2006 - Mar 2007)					Total of 2005
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	820	0	0	0	0	820
Moderately Dense Forest	0	24,746	0	0	59	24,805
Open Forest	0	7	19,472	2	125	19,606
Scrub	0	0	5	10,340	49	10,394
Non-Forest	0	4	48	30	219,362	219,444
Total of 2007	820	24,757	19,525	10,372	219,595	275,069
Net Change	0	-48	-81	-22	151	

Table 7.1.3: District-wise forest cover in 2007

Number of districts: 23

(area in km²)

District	Geographical area	Very dense forest	Mod. dense forest	Open forest	Total	% of G.A.	Change*	Scrub
Adilabad ^T	16,128	127	3,650	2,307	6,084	37.72	-24	126
Anantapur	19,130	0	73	353	426	2.23	-2	956
Chittoor	15,151	7	929	1,463	2,399	15.83	-3	1,566
East Godawari ^T	10,807	72	2,519	970	3,561	32.95	-1	168
Guntur	11,391	0	219	644	863	7.58	-1	392
Hyderabad & Rangareddy	7,710	0	49	342	391	5.07	-3	255
Cuddapah	15,359	9	1,898	1,502	3,409	22.20	-1	1,304
Karimnagar	11,823	0	980	703	1,683	14.23	-11	370
Khammam ^T	16,029	28	5,212	1,872	7,112	44.37	-56	42
Krishna	8,727	0	83	230	313	3.59	0	214
Kurnool	17,658	59	1,331	741	2,131	12.07	-7	403
Mahboobnagar	18,432	329	538	1,077	1,944	10.55	-5	326
Medak	9,700	0	82	504	586	6.04	0	143
Nalgonda	14,240	0	10	141	151	1.06	-8	359
Nellore	13,076	5	261	671	937	7.17	-3	680
Nizamabad	7,956	0	217	981	1,198	15.06	-2	140
Prakasam	17,626	172	1,342	1,590	3,104	17.61	13	859
Srikakulam ^T	5,837	0	108	508	616	10.55	0	471
Vijainagaram ^T	6,539	0	145	604	749	11.45	0	342
Vishakhapatnam ^T	11,161	0	2,054	1,391	3,445	30.87	0	1,071
Warangal ^T	12,847	0	2,436	655	3,091	24.06	-14	157
West Godawari ^T	7,742	12	621	276	909	11.74	-1	28
Total	275,069	820	24,757	19,525	45,102	16.40	-129	10,372

* Change compared to 2005 assessment (revised).

7.1.6 Altitude Zone wise Forest Cover

Forest cover of the State in different altitude zones is given in Table 7.1.4.

Table 7.1.4: Altitude zone wise forest cover

(area in km²)

Altitude Zone	VDF	MDF	OF	Total
0-500m	236	17,714	13,778	31,728
500-1000m	584	6,540	5,392	12,516
1000-2000m	0	503	355	858
Total	820	24,757	19,525	45,102

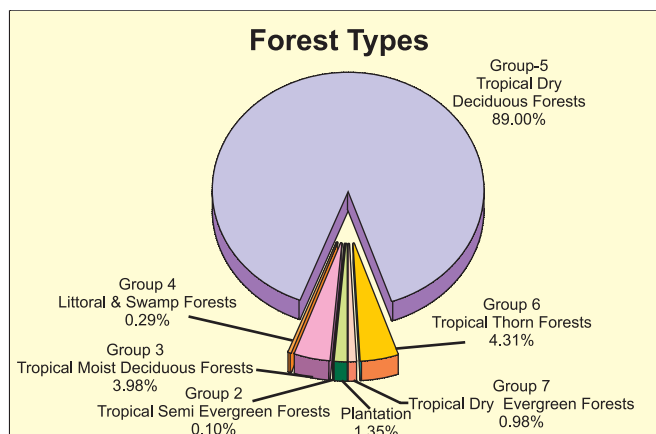
(based on SRTM Digital Elevation Model)

7.1.7 Forest Cover in different Forest Types

As per Champion & Seth Classification, the State has 16 forest types which belong to 6 forest type groups viz. Tropical Semi-Evergreen, Tropical Moist Deciduous, Littoral & Swamp, Tropical Dry Deciduous, Tropical Thorn, Tropical Dry Evergreen Forests. Distribution of forest cover in different forest type groups found in the State is given in the pie diagram.

7.1.8 Tree Cover

Tree cover of the State has been estimated using sample data of TOF inventory collected over a period of six years i.e. 2002-08. The estimated tree cover in the State is 7,191 km² which is 2.61% of the geographical area of the State. Eight districts of the State (Anantapur, Cuddapah, East Godawari, Karimnagar, Nizamabad, Prakasam, Srikakulam and



Vishakapatnam) have been inventoried. Andhra Pradesh ranks fourth among the States in terms of extent of tree cover. The forest and tree cover of the State is presented in the Table 7.1.5.

Table 7.1.5: Forest & tree cover

(area in km²)

Category	Area	% of Geographical area
Tree Cover	7,191	2.61
Forest Cover	45,102	16.40
Forest & Tree Cover	52,293	19.01