

7.25 TAMIL NADU

7.25.1 Introduction

Tamil Nadu is located in the southernmost part of the country. It has a geographical area of 130,058 km², which constitutes 3.96% of the area of the country. It lies between latitude 8°05' and 13°35' N and longitude 76°15' and 80°20' E.

Physiographically, the State can be divided into four major regions, namely, Coastal Plains, Eastern Ghats, Central Plateau and higher elevation mountains. Cauvery, Pennaiyar and Vaigai are three main rivers flowing through the State. The south-west monsoon feeds the plateau and the retreating north-east monsoon brings rain to the east coast. The temperature in State ranges from 2°C in the hills to 45°C in other areas. The average rainfall ranges from 925 to 1,170 mm.

As per Census 2001, the total population of the State is 62.40 million of which the rural population constitute 56%. The population density is 480 persons per km². The Scheduled Tribes constitute only 1.0% of the population. The projected population of the State is 65.57 million (as projected by the Office of RGI for 2009) which constitutes 5.82% of the country's population. The livestock population of the State is 24.94 million (Livestock Census 2003), which has marginally decreased since the census of 1992.

Land use pattern of the State is given in Table 7.25.1.

Table 7.25.1: Land use pattern

Land Use	Area in '000 ha	Percentage
Total geographical area	13,006	
Reporting area for land utilization	13,027	100.00
Forests	2,106	16.17
Not available for cultivation	2,662	20.43
Permanent pastures and other grazing lands	110	0.84
Land under misc. tree crops & groves	268	2.06
Culturable wasteland	354	2.72
Fallow lands other than current fallows	1,493	11.46
Current fallows	907	6.96
Net area sown	5,126	39.35

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

7.25.2 Recorded Forest Area

The recorded forests area is 22,877 km², which constitutes 17.59 % of the geographic area of the State. Reserved Forests comprise 84.75%, Protected Forests, 9.54 % and Unclassed Forests, 5.71% of the total forest area.

7.25.3 Protected Areas

The State has 5 National Parks and 21 Wildlife Sanctuaries and one Conservation Reserve spread over an area of 3,829.8 km², which constitutes 2.94% of the geographic area. Kalakad Mundanthurai Tiger Reserve and Mudumalai Sanctuary fall in the State. Mukruti National Park, which is located in Nilgiris, is famous for Nilgiri Tahr. The State has 2 Biosphere Reserves namely Gulf of Mannar and Nilgiri.

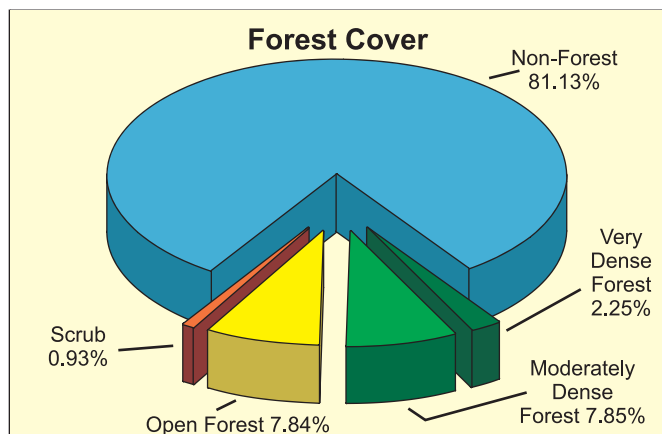
7.25.4 Joint Forest Management

JFM started in the State in 1997 which coincided with the launch of JBIC Project. There are 1,367 JFM Committees managing about 0.48 million ha of forest area, which is about 21% of the forest area of the State. More than 0.24 million families are involved in this programme, of which around 10,000 families belong to the Scheduled Tribes. Water harvesting structures form an important component of the JFM programme.

Source: MoEF, 2005.

7.25.5 Forest Cover

The forest cover in the State, based on



interpretation of satellite data of Jan 2006 - May 2007, is 23,338 km², which is 17.94% of the State's geographical area. In terms of forest canopy density classes, the State has 2,926 km² very dense forest, 10,216 km² moderately dense forest and 10,196 km² open forest. The distribution of forest cover of the State is shown in Fig. 7.25.

Comparison of the current forest cover (satellite data of Jan 2006 - May 2007) with the previous assessment (satellite data of Dec 2004 - Feb 2005) shows gain of 24 km² of forest cover.

The change matrix, given in Table 7.25.2, reveals that there has been an increase of 1 km² in very dense forest and 27 km² in moderately dense forest and a decrease of 4 km² in the open forest.

On the basis of ground truthing by the officials of FSI, main reason for increase has been successful plantation mainly in districts of Pudukkottai, Nagapattinam, Villupuram, Madurai, Thanjavur, Tirunelveli, Kancheepuram, Ariyalur and Virudhunagar.

District wise forest cover in different canopy density classes and scrub along with the changes compared to 2005 assessment is given in the Table 7.25.3.

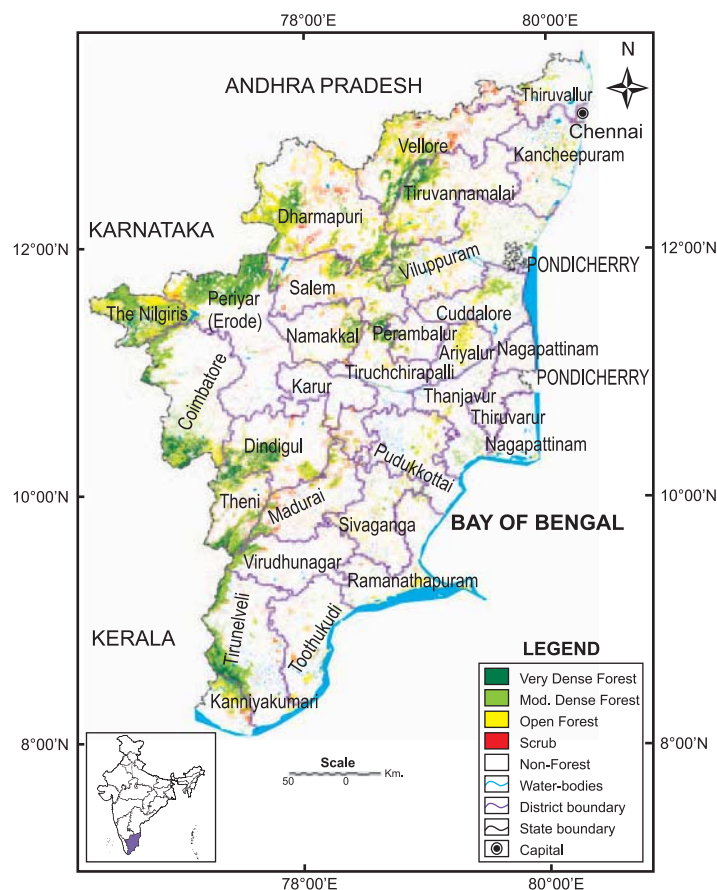


Fig. 7.25 : Forest cover map of Tamil Nadu

Forest and Tree Resources in States and Union Territories

Table 7.25.2: Forest cover change matrix

(area in km²)

2005 Assessment (Data of Dec 2004 - Feb 2005)	2007 (Data of Jan 2006 - May 2007)					Total of 2005
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	2,899	23	3	0	0	2,925
Moderately Dense Forest	25	9,693	58	4	409	10,189
Open Forest	1	68	9,616	12	503	10,200
Scrub	0	4	11	1,131	16	1,162
Non-Forest	1	428	508	59	104,586	105,582
Total of 2007	2,926	10,216	10,196	1,206	105,514	130,058
Net Change	1	27	-4	44	-68	

Table 7.25.3: District-wise forest cover in 2007

Number of districts: 30

(area in km²)

District	Geographical area	Very dense forest	Mod. dense forest	Open forest	Total	% of G.A.	Change*	Scrub
Ariyalur	1,947	0	66	251	317	16.28	2	1
Chennai	144	0	5	4	9	6.25	0	0
Coimbatore ^h	7,469	379	951	540	1,870	25.04	-5	15
Cuddalore	3,706	0	219	225	444	11.98	-2	10
Dharmapuri ^t	9,622	239	1,080	1,708	3,027	31.46	0	201
Dindigul	5,580	352	537	540	1,429	25.61	0	64
Erode	8,209	439	1,409	367	2,215	26.98	1	37
Kancheepuram	4,474	0	113	259	372	8.31	3	24
Kanniyakumari ^h	1,684	43	224	212	479	28.44	0	34
Karur	2,901	0	28	60	88	3.03	0	6
Madurai ^h	4,277	23	291	254	568	13.28	4	134
Nagapattinam	2,140	0	26	32	58	2.71	5	0
Namakkal ^t	3,413	55	189	300	544	15.94	-1	22
Perambalur ^t	1,748	19	36	86	141	8.07	-1	8
Pudukkottai	4,651	0	78	174	252	5.42	16	8
Ramanathapuram	4,232	0	76	197	273	6.45	-6	4
Salem ^t	5,235	139	422	657	1,218	23.27	0	79
Sivaganga	4,086	0	86	226	312	7.64	-1	17
Thanjavur	3,415	0	131	52	183	5.36	4	0
The Nilgiris ^h	2,549	240	998	810	2,048	80.35	-1	0
Theni	2,764	202	508	298	1,008	36.47	-3	64
Thiruvallur	3,413	0	59	154	213	6.24	0	79
Thiruvarur	2,716	0	23	6	29	1.07	1	0
Tiruchchirappalli ^t	4,511	74	146	190	410	9.09	-1	50
Tirunelveli ^h	6,810	282	780	177	1,239	18.19	4	47
Tiruvannamalai ^t	6,191	169	523	695	1,387	22.40	0	57
Toothukudi	4,621	0	28	139	167	3.61	1	23
Vellore	6,077	172	628	938	1,738	28.60	-3	185
Viluppuram	7,190	70	370	571	1,011	14.06	5	20

continued

District	Geographical area	Very dense forest	Mod. dense forest	Open forest	Total	% of G.A.	Change*	Scrub
Virudhunagar	4,283	29	186	74	289	6.75	2	17
Total	130,058	2,926	10,216	10,196	23,338	17.94	24	1,206

* Change compared to 2005 assessment (revised).

7.25.6 Altitude Zone wise Forest Cover

Forest cover of the State in different altitude zones is given in Table 7.25.4.

Table 7.25.4: Altitude zone wise forest cover

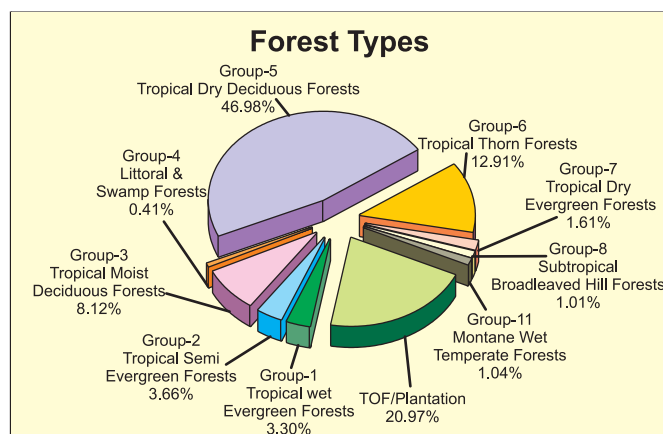
(area in km²)

Altitude Zone	VDF	MDF	OF	Total
0-500m	245	3,882	6,221	10,348
500-1000m	1,403	4,252	3,056	8,711
1000-2000m	1,065	1,801	830	3,696
2000-3000m	213	281	89	583
Total	2,926	10,216	10,196	23,338

(based on SRTM Digital Elevation Model)

7.25.7 Forest Cover in different Forest Types

As per Champion & Seth Classification, the State has 39 forest types which belong to 9 forest type groups viz Tropical Wet Evergreen, Tropical Semi Evergreen, Tropical Moist Deciduous, Littoral & Swamp, Tropical Dry Deciduous, Tropical Thorn, Tropical Dry Evergreen, Subtropical Broadleaved Hill and Montane Wet Temperate Forests. Distribution of forest cover in different forest type groups found in the State is given in the pie diagram.



7.25.8 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 4,968 km² which is 3.82% of the geographical area of the State. Eleven districts

(Coimbatore, Dindigul, Erode, Kancheepuram, Kanniyakumari, Madurai, Namakkal, The Nilgiris, Theni, Thiruvavur and Virudhunagar) of the State have been inventoried. The forest and tree cover of the State is presented in the Table 7.25.5.

Table 7.25.5: Forest & tree cover

(area in km²)

Category	Area	% of Geographical area
Tree Cover	4,968	3.82
Forest Cover	23,338	17.94
Forest & Tree Cover	28,306	21.76