



Telangana

9.26.1 Introduction

Telangana covers an area of 1,12,077 sq km which is 3.41% of the geographical area of the country. Physiographically, the State falls in the Deccan plateau region. Telangana has a subtropical climate. The average annual rainfall varies from about 1,100 mm to about 1,250 mm and the average annual temperature ranges between 15°C to 45°C. The State is drained by a number of rivers, which include Godavari and Krishna. The state comprises 10 districts, among which 3 are tribal districts. The State does not have any hill districts. As per the 2011 census, Telangana has a population of 35.19 million accounting to 2.91% of India's population. The rural and urban population constitute 21.58 million and 13.61 million respectively. The average population density of the state is 306 per sq km which is lower than the national average of 382 persons per sq km. The 19th Livestock census 2012 has reported a total livestock population of 56.10 million for the undivided state of Andhra Pradesh which includes Telangana.

Table 9.26.1 Land Use Pattern

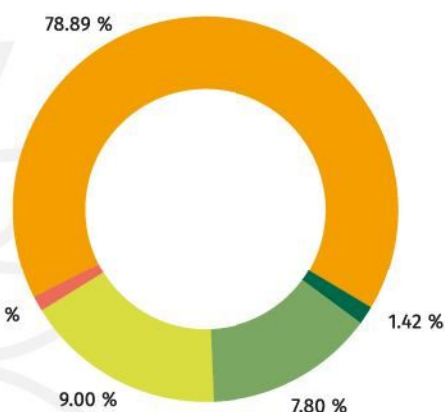
Land Use Types	Area (in 000' ha)	Percentage
Total Geographic Area	11,487	
Reporting area for land utilization	11,484	100.00
Forests	2,743	23.88
Not available for land cultivation	1,510	13.15
Permanent pastures and other grazing lands	302	2.63
Land under misc. tree crops and groves	114	0.99
Culturable wasteland	178	1.55
Fallow land other than current fallows	717	6.24
Current fallows	960	8.36
Net area sown	4,961	43.20

Source: Land Use Statistics, Ministry of Agriculture, GOI, 2013-14.

9.26.2

Forest Cover

Based on interpretation of satellite data pertaining to Oct-Dec 2015, the Forest Cover in the State is 20,419 sq km which is 18.22% of the State's geographical area. In terms of Forest Canopy Density classes, the State has 1,596 sq km under Very Dense Forest, 8,738 sq km under Moderately Dense Forest and 10,085 sq km under open Forest.



Forest cover of Telangana

Pie Chart showing forest cover of Telangana



9.26.3

Forest Cover within and outside Recorded Forest Area

The State has reported a recorded forest area of 26,904 sq km which is 24.00% of its geographical area. The Reserved, Protected and Unclassed Forests are 75.65%, 22.07% and 2.28% respectively, of recorded forest area. However, as the digitized boundary of recorded forest area from the State covers 28,740 sq km, the analysis of forest cover within and outside this area is depicted below.

Table 9.26.2 Forest Cover within and outside Recorded Forest Area

Forest Cover within Recorded Forest Area (Area in sq km)	
Very Dense Forest (VDF)	1,583
Moderately Dense Forest (MDF)	8,410
Open Forest (OF)	8,345
Total	18,338
Forest Cover outside Recorded Forest Area	
Very Dense Forest	13
Moderately Dense Forest	328
Open Forest	1,740
Total	2,081
Total Forest Cover	20,419
Tree Cover	2,669
Total Forest & Tree Cover	23,088
Of State's Geographical Area	20.60%
Of India's Forest & Tree Cover	2.88%
Per capita Forest & Tree Cover	0.07 ha

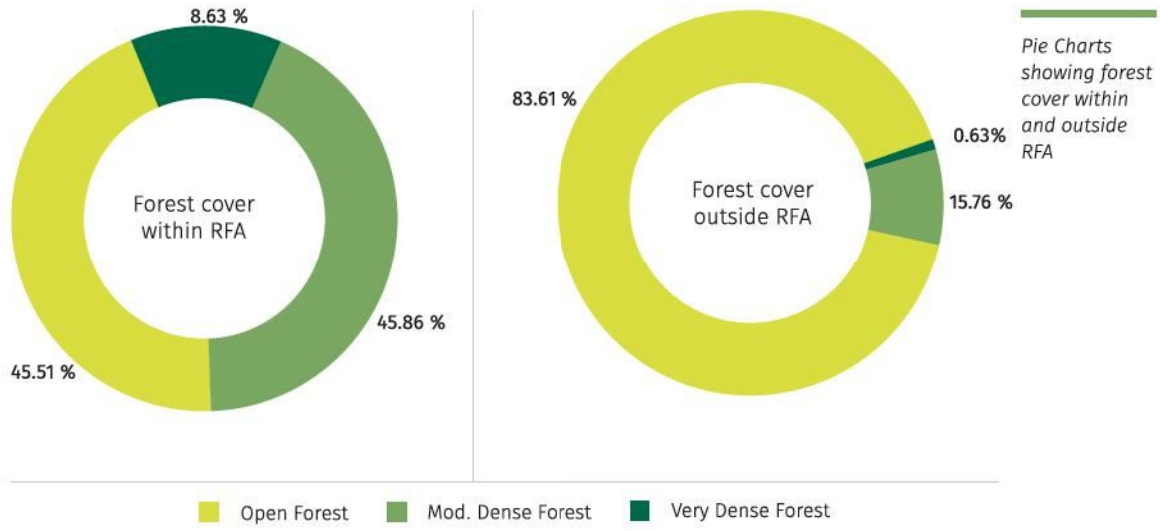


Table 9.26.3 Altitude-wise Forest Cover (Area in sq km)

Altitude Zone (m)	Geographical Area	VDF	MDF	OF	Total Forest
0-500	88,743	1,262	7,478	7,442	16,182
500-1000	23,334	334	1,260	2,643	4,237
Total	1,12,077	1,596	8,738	10,085	20,419

(Based on SRTM, Digital Elevation Model)

Table 9.26.4 Forest Cover in different Patch Size Classes

S.No.	Patch Size Range (sq km)	No. of Patches	Area (sq km)	%age
1.	≥ 0.01 ≤ 1.0	13,150	1,258	6.16
2.	> 1.0 ≤ 10	583	1,699	8.32
3.	> 10 ≤ 100	106	2,544	12.46
4.	> 100 ≤ 500	16	3,155	15.45
5.	> 500 ≤ 1000	4	2,792	13.68
6.	> 1000 ≤ 5000	4	8,971	43.93
	Total	13,863	20,419	100

Table 9.26.5 Growing Stock

	Growing Stock	% Contribution to country
Growing Stock in Recorded Forest Area	60.462 m cum	1.43
Growing Stock in TOF	39.660 m cum	2.47
Potential Production of industrial wood from TOF	1.85 m cum	2.48
Bamboo bearing area within forest area of the state	4,778 sq km	3.05
Total number of culms	651 millions	2.32
Total green weight equivalent of culms	5,009 (000' tonnes)	2.65

9.26.4

Carbon Stock in forest

The total Carbon stock of forests in the State is 184,975 million tonnes (678,242 million tonnes of CO₂ equivalent) which is 2.61% of total forest carbon of the country.

9.26.5

Decadal Change in water bodies within Forest

An increase of 357 sq km has been observed in the water body coverage within Forest compared to 2005. The graphical and tabular comparison is depicted below.

Extent of water bodies within forest

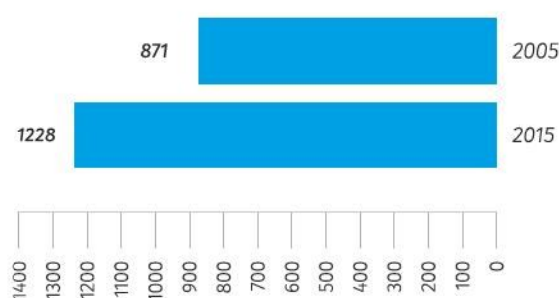


Table 9.26.6 Water bodies within Forest for the years 2005 and 2015

Area/Coverage	2005	2015
Extent of water bodies (sq km) within Forest	871	1228
% of water bodies to Forest Cover	4.24	6.01

Table 9.26.7 District- wise Forest Cover

(area in sq km)

District	Geo-graphical Area	2017 Assessment				%of GA	Change *	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Adilabad ^T	16,105	147	3,281	2,260	5,688	35.32	-320	125
Hyderabad	217	0	5	12	17	7.83	11	2
Rangareddy	7,493	0	134	626	760	10.14	353	468
Karimnagar	11,823	71	752	1,139	1,962	16.59	271	497
Khammam ^T	13,266	717	2,260	1,456	4,433	33.42	-436	41
Mahbubnagar	18,432	338	582	1,378	2,298	12.47	336	590



District	Geo-geographical Area	2017 Assessment				% of GA	Change *	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Medak	9,699	0	117	629	746	7.69	160	333
Nalgonda	14,240	0	18	392	410	2.88	247	714
Nizamabad	7,956	0	240	947	1,187	14.92	17	237
Warangal [†]	12,846	323	1,349	1,246	2,918	22.72	-74	231
Grand Total	1,12,077	1,596	8,738	10,085	20,419	18.22	565	3,238

*Change compared to updated 2015 assessment.

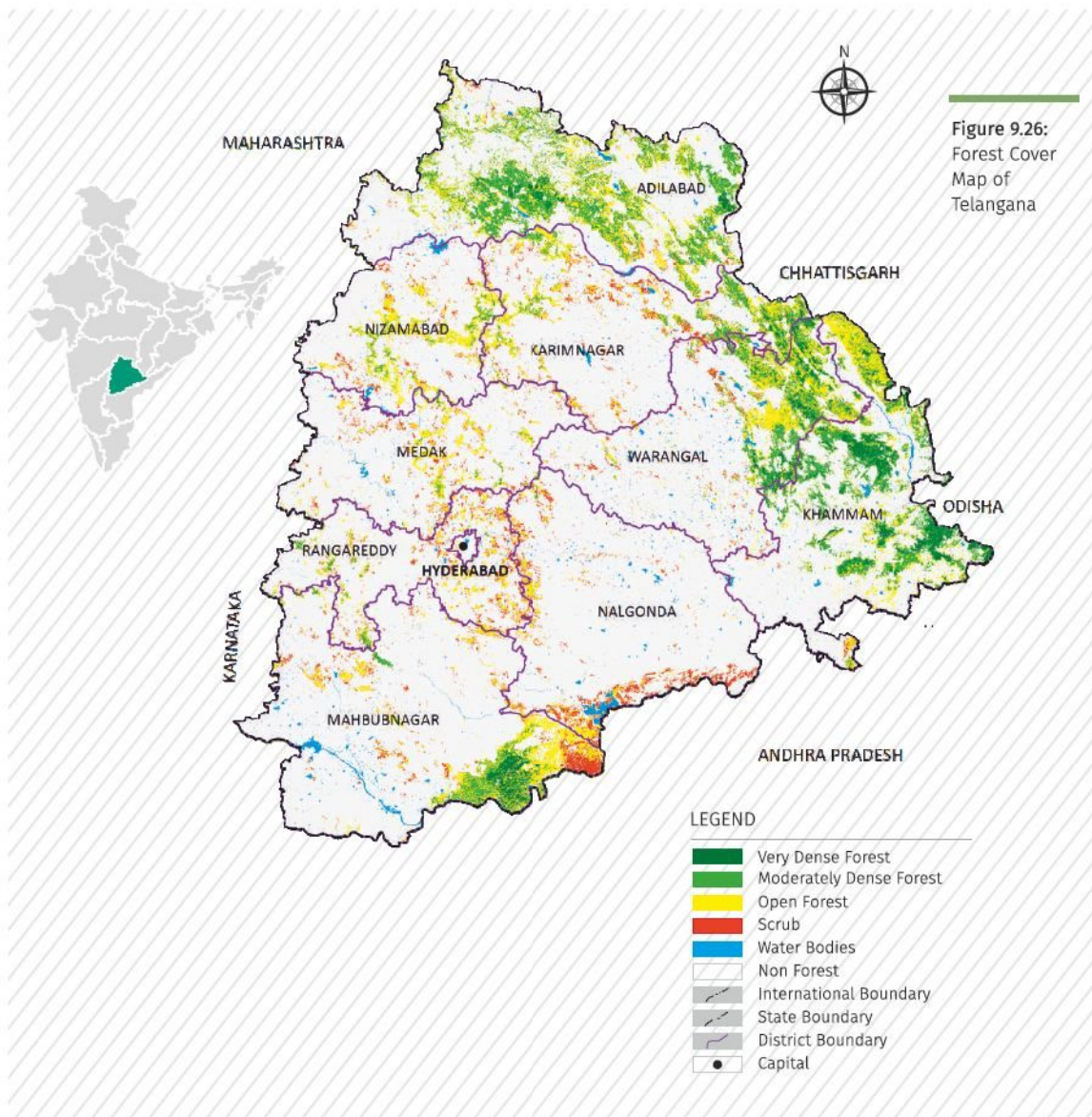


Table 9.26.8 Forest Cover Change Matrix

(area in sq km)

Class	2017 Assessment					Total ISFR 2015 updated
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	410	55	0	0	0	465
Moderately Dense Forest	1,139	7,839	1,514	14	834	11,340
Open Forest	47	737	6,215	95	955	8049
Scrub	0	28	764	992	102	1,886
Non Forest	0	79	1,592	2,137	86,529	90,337
Total 2017	1,596	8,738	10,085	3,238	88,420	1,12,077
Net Change	1,131	-2,602	2,036	1,352	-1,917	

9.26.6

Reasons for change detected in 2017 assessment

A net increase of 565 sq km has been observed in the State compared to the previous assessment, the reasons for which can be attributed to expansion of tree cover mostly outside recorded forest areas. The decrease in Forest Cover in Adilabad and Khammam districts are due to the rotational felling of commercial plantations.

