

9.32



Chandigarh

9.32.1 Introduction

The Union territory of Chandigarh, having a geographical area of 114 sq km constitutes 0.003% of the geographical area of the country. Physiographically, the UT falls in the northern plains although it lies close to Shiwalik hills. The average annual rainfall varies from about 400mm to 600mm and the average annual temperature ranges between 1°C to 45°C. As per the 2011 census, Chandigarh comprises of a single district, which is neither hill nor tribal. The UT has a population of 1.06 million accounting to 0.09% of India's population. The rural and urban population constitutes 2.75% and 97.25% respectively. The population density of the UT is 9,258 persons per sq km. The 19th livestock census 2012 has reported a total livestock population of 24,197 in Chandigarh.

Table 9.32.1 Land Use Pattern

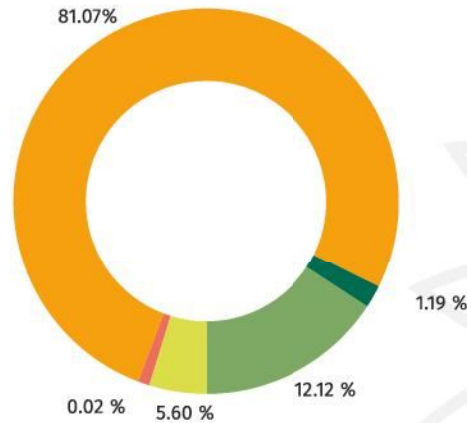
Land Use Types	Area (in 000' ha)	Percentage
Total Geographic Area	11	
Reporting area for land utilization	7.02	100
Forests	0.21	2.99
Not available for land cultivation	5.26	74.93
Permanent pastures and other grazing lands	0	0.00
Land under misc. tree crops and groves	0.18	2.56
Culturable wasteland	0	0.00
Fallow land other than current fallows	0.05	0.71
Current fallows	0.03	0.43
Net area sown	1.29	18.38

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

9.32.2

Forest Cover

Based on the interpretation of satellite data pertaining to Oct-Dec 2015, The forest cover of the UT is 21.56 sq km which is 18.91% of the geographical area. In terms of forest canopy density classes, the UT has 1.36 sq km under very dense forest, 13.82 sq km under moderately dense forest and 6.38 sq km under open forest.



Forest cover of Chandigarh

Pie chart showing forest cover of Chandigarh

■ Non Forest
 ■ Scrub
 ■ Open Forest
 ■ Mod. Dense Forest
 ■ Very Dense Forest

9.32.3

Forest cover within and outside Green Wash Area

The recorded forest area of the UT is 35 sq km which is 30.70% of its geographical area. The Reserved and Unclassed forests are 91.43% and 8.57% respectively of the Recorded Forest Area. Due to non-availability of digitized boundary of recorded forest area from the UT, the updated green wash which is 6.16 sq km has been used and the analysis of forest cover within and outside this area is depicted below.

Table 9.32.2 Forest Cover within and outside Green Wash Area

Forest Cover within Green Wash (Area in sq km)	
Very Dense Forest	1.13
Moderately Dense Forest	2.22
Open Forest	1.30
Total	4.65
Forest Cover outside Green Wash	
Very Dense Forest	0.23
Moderately Dense Forest	11.60
Open Forest	5.08
Total	16.91
Total Forest Cover	21.56
Tree Cover	10
Total Forest and Tree Cover	31.56
Of UT's Geographical Area	27.68%
Of India's Forest & Tree Cover	0.004%
Per capita Forest & Tree Cover	0.003 ha

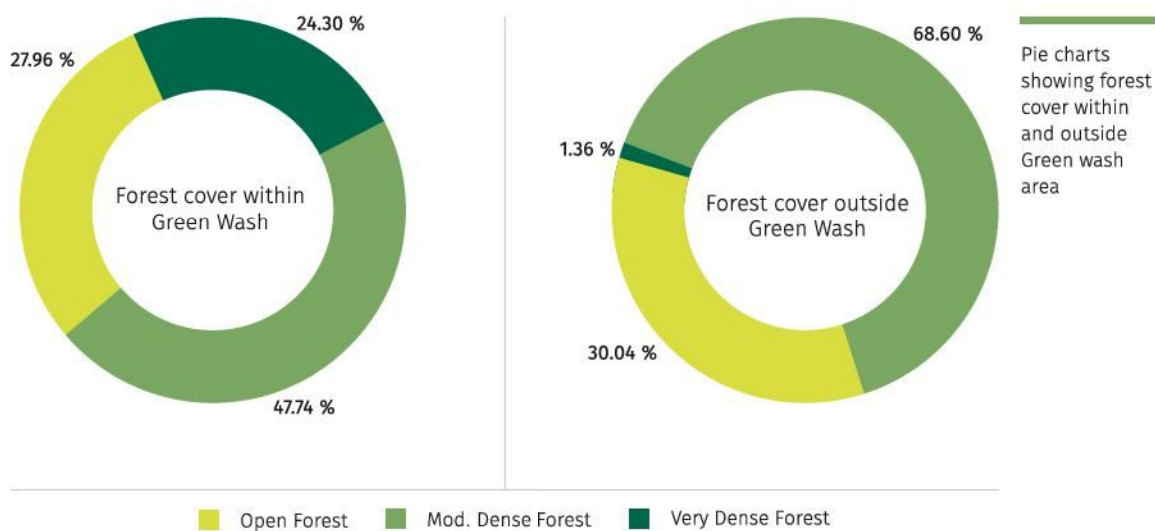


Table 9.32.3 Attitude-wise Forest Cover

Altitude Zone (m)	Geographical Area	VDF	MDF	OF	Total
0-500	114	1.36	13.82	6.38	21.56
Total	114	1.36	13.82	6.38	21.56

(Based on SRTM, Digital Elevation Model)

Table 9.32.4 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	161	11.83	54.87
2.	> 1.0 ≤ 10	4	9.73	45.13
	Total	165	21.56	100

Table 9.32.5 Growing Stock

	Growing Stock	% Contribution to country
Growing Stock in Recorded Forest Area	0.321 m cum	0.008
Growing Stock in TOF	0.103 m cum	0.006
Potential Production of industrial wood from TOF	0.01 m cum	0.013
Bamboo bearing area within forest area of the UT	-	-
Total number of culms	-	-
Total green weight equivalent of culms	-	-

9.32.4

Carbon Stock

The total Carbon stock of forests in the UT is 0.204 million tonnes (0.748 million tonnes of CO₂ equivalent) which is 0.003 % of total forest carbon of the country.

9.32.5

Decadal Change in water bodies within Forest Cover

An increase of 0.04 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

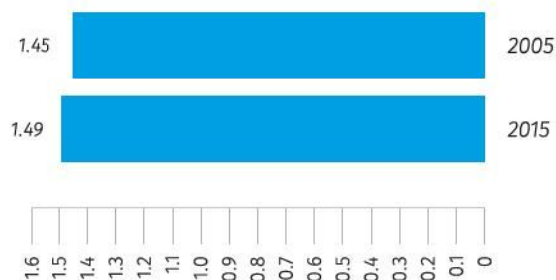


Table 9.32.6 Water bodies within Forest for the years 2005 and 2015

Area/Coverage	2005	2015
Extent of water bodies (sq km) within Forest	1.45	1.49
% of water bodies to Forest Cover	8.53	6.91

Table 9.32.7 District- wise Forest Cover

(area in sq km)

District	Geo-geographical Area	2017 Assessment				% of GA	Change *	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Chandigarh	114	1.36	13.82	6.38	21.56	18.91	-0.10	0.02
Total	114	1.36	13.82	6.38	21.56	18.91	-0.10	0.02

*Change compared to updated 2015 assessment.

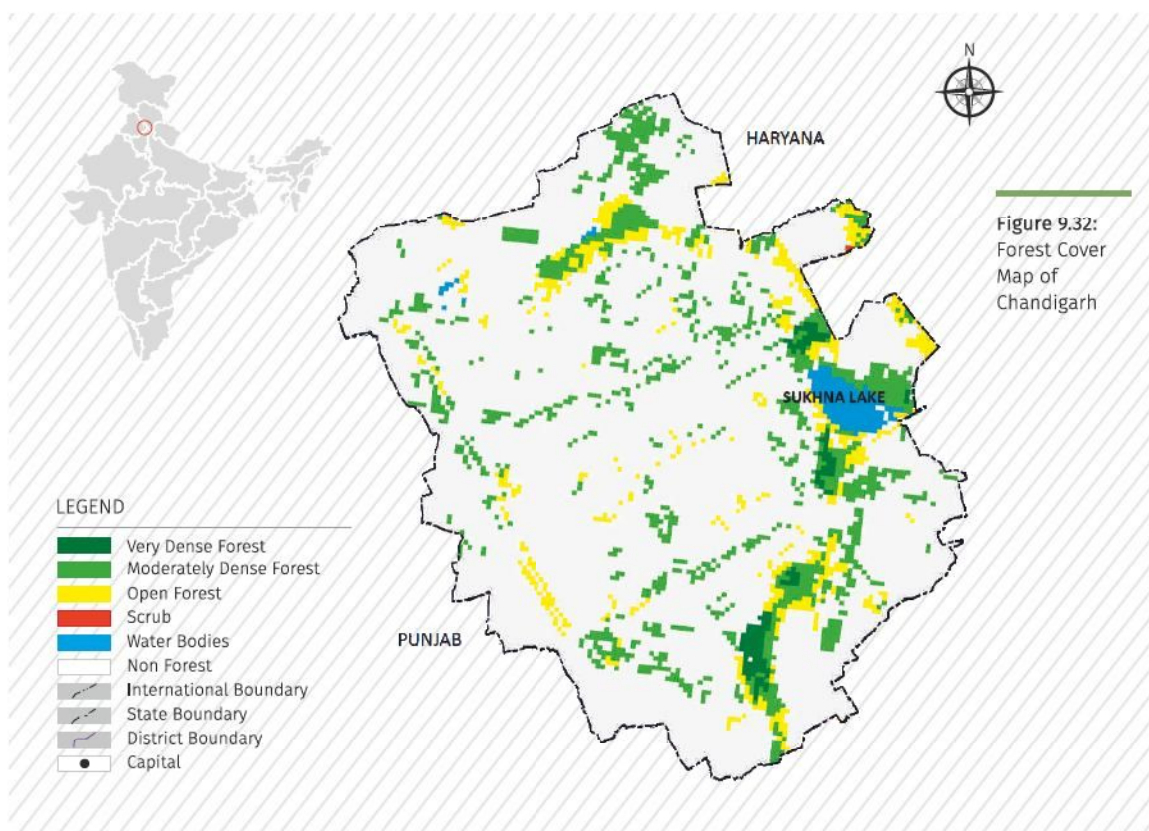


Table 9.32.8 Forest Cover Change Matrix (area in sq km)

Class	2017 Assessment					Total ISFR 2015 updated
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	1.36	0	0	0	0	1.36
Moderately Dense Forest	0	13.82	0	0	0.10	13.92
Open Forest	0	0	6.38	0	0	6.38
Scrub	0	0	0	0.02	0	0.02
Non Forest	0	0	0	0	92.32	92.32
Total ISFR 2017	1.36	13.82	6.38	0.02	92.42	114
Net Change	0	-0.10	0	0	0.10	

9.32.6

Reasons for change detected in 2017 assessment

A small negative change of 0.10 sq km in the forest cover of the UT could be attributed to developmental activities.