

7.6 DELHI

7.6.1 Introduction

Delhi, the capital of India, is located on the bank of river Yamuna. The geographical area of Delhi is 1,483 km² and lies between latitude 28°22' to 28°54' N and longitude 76°48' to 77°23' E. It is the largest metropolis by area and second largest metropolis by population in the country. Delhi lies almost entirely in the Gangetic plains. Two prominent features of the geography of Delhi are the Yamuna flood plain and Delhi ridge.

The climate of Delhi is hot during major part of the year. Summers are long and extremely hot from April to October. The annual temperature varies from 3° to 45°C. The rainfall ranges between 400 mm to 600 mm.

The land use pattern of Delhi is given in Table 7.6.1.

The total population of Delhi is 13.85 million (Census 2001). The urban population is 93.18% and rural 6.82%. The population density of 9,340 persons per km² is the highest in the country. The projected population of the State by the Office of RGI, for the year 2009 is 17.44 million. The livestock population is 373,000 (Livestock Census 2003), which has increased by about 17% since the census of 1992.

7.6.2 Recorded Forest Area

The recorded forest area in Delhi is 85 km², which is 5.73% of the geographical area. Reserved and

Protected Forests constitute 91.76% and 8.24% of the total forest area respectively.

7.6.3 Protected Areas

There is only one Wildlife Sanctuary, Asola - Bhatti, which was notified in 1992 and covers an area of 1,991 ha.

7.6.4 Forest Cover

The forest cover in Delhi, based on interpretation of satellite data of October 2006, is 176.58 km², which is 11.91% of the State's geographical area. In terms of forest canopy density classes, the Delhi has 6.76 km² very dense forest, 49.84 km² moderately dense forest, and 119.98 km² open forest. The distribution of forest cover is shown in Fig.7.6.

Comparison of the current forest cover (satellite data of Oct 2006) with the previous assessment (satellite data of Nov - Dec 2004) shows a gain of 0.14 km² of forest cover.

The change matrix, given in Table 7.6.2 reveals that there has been an increase of 0.02 km² in the moderately dense forest, and 0.12 km² in open forest.

On the basis of ground truthing by the officials of FSI and the information gathered from the Forest Department, main reasons for the increase in forest

Table 7.6.1: Land use pattern

Land Use	Area in '000 ha	Percentage
Total geographical area	148	
Reporting area for land utilization	147	100.00
Forests	1	0.68
Not available for cultivation	92	62.59
Permanent pastures and other grazing lands	0	0.00
Land under misc. tree crops & groves	1	0.68
Culturable wasteland	10	6.80
Fallow lands other than current fallows	8	5.44
Current fallows	12	8.16
Net area sown	23	15.65

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

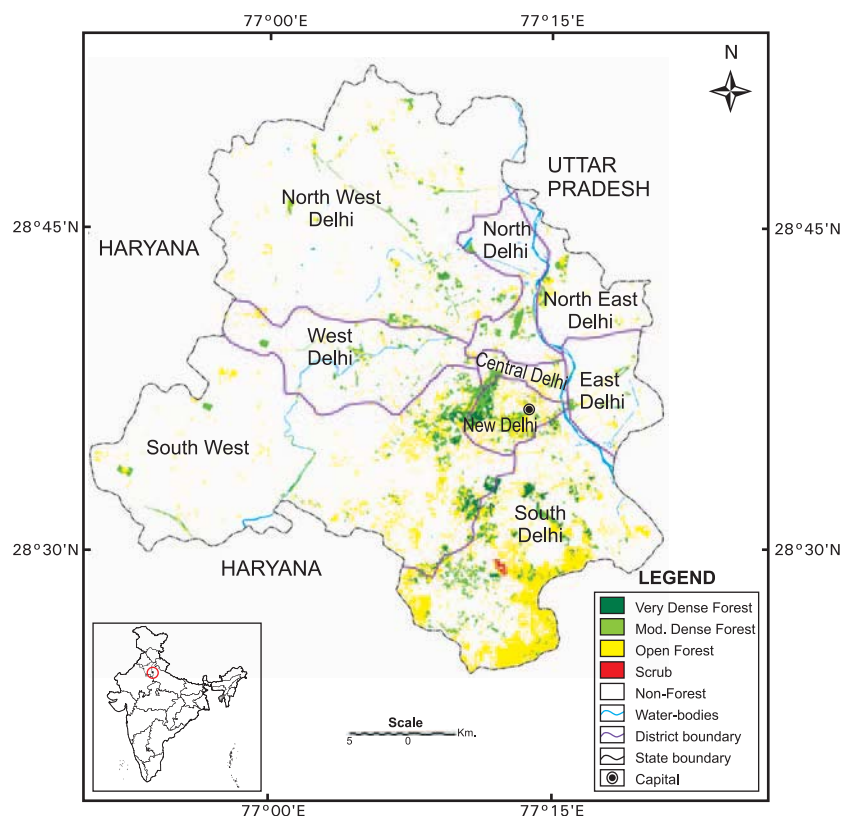


Fig 7.6 : Forest cover map of Delhi

cover in the North Delhi and North-East Delhi districts is new plantation whereas, the reasons for decrease in forest cover in the district East Delhi is due to clear felling.

District wise forest cover in different canopy density classes and scrub along with the changes compared to 2005 assessment is given in the Table 7.6.3.

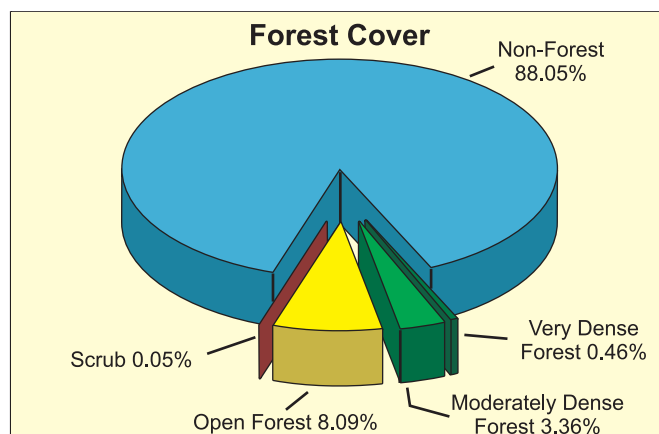


Table 7.6.2: Forest cover change matrix

(area in km²)

2005 Assessment (Data of Nov-Dec 2004)	2007 (Data of Oct 2006)					Total of 2005
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	6.76	0	0	0	0	6.76
Moderately Dense Forest	0	49.67	0	0	0.15	49.82
Open Forest	0	0.10	119.62	0	0.14	119.86
Scrub	0	0	0	0.70	0	0.70
Non-Forest	0	0.07	0.36	0	1,305.44	1,305.87
Total of 2007	6.76	49.84	119.98	0.70	1,305.73	1,483.01
Net Change	0	0.02	0.12	0	-0.14	

Table 7.6.3: District-wise forest cover in 2007

Number of districts: 9

(area in km²)

District	Geographical area	Very dense forest	Mod. dense forest	Open forest	Total	% of G.A.	Change*	Scrub
Central Delhi	25	0	2.23	2.82	5.05	20.20	0	0
East Delhi	64	0	1.14	1.85	2.99	4.67	-0.29	0
North-East Delhi	60	0	1.31	2.28	3.59	5.98	0.39	0
North-West Delhi	440	0.11	7.33	8.97	16.41	3.73	0	0
New Delhi	35	1.67	5.53	9.11	16.31	46.60	0	0
North Delhi	59	0	2.99	1.82	4.81	8.15	0.04	0
South-West Delhi	421	2.37	12.85	27.23	42.45	10.08	0	0
South Delhi	250	2.61	13.64	62.39	78.64	31.46	0	0.7
West Delhi	129	0	2.82	3.51	6.33	4.91	0	0
Total	1,483	6.76	49.84	119.98	176.58	11.91	0.14	0.7

* Change compared to 2005 assessment (revised).

7.6.5 Altitude Zone wise Forest Cover

The entire forest cover of Delhi falls in the altitude zone 0 - 500 m as given in Table 7.6.4.

Table 7.6.4: Altitude zone wise forest cover

(area in km²)

Altitude Zone	VDF	MDF	OF	Total
0-500m	6.76	49.84	119.98	176.58
Total	6.76	49.84	119.98	176.58

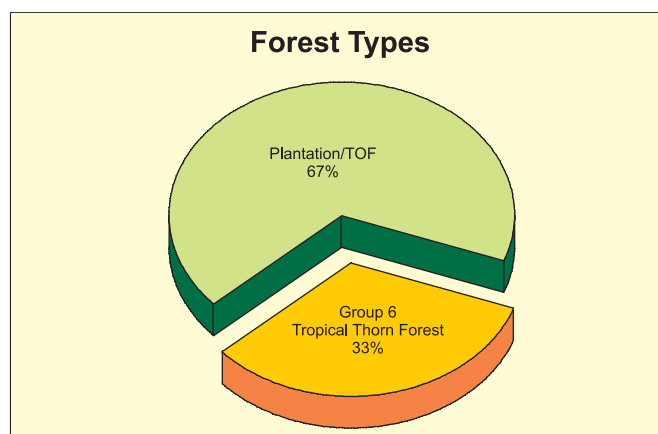
(based on SRTM Digital Elevation Model)

7.6.6 Forest Cover in different Forest Types

As per Champion & Seth Classification, Delhi has Ravine Thorn Forests (6B/C₂) which belong to the forest type group Tropical Thorn Forests. Distribution of forest cover in different forest type groups found in Delhi is given in the pie diagram.

7.6.7 Tree Cover

Tree cover of Delhi has been estimated using sample data of TOF inventory collected over a period of six years i.e. 2002-08. The estimated tree cover is 123 km² which is 8.29% of the geographical area. South



Delhi district has been inventoried. The forest and tree cover is presented in the Table 7.6.5.

Table 7.6.5: Forest & tree cover

(area in km²)

Category	Area	% of Geographical area
Tree Cover	123	8.29
Forest Cover	176.58	11.91
Forest & Tree Cover	299.58	20.20