9.30 ANDAMAN & NICOBAR ISLANDS

9.30.1 Introduction

The Union Territory comprises of the Andaman Islands and the Nicobar Islands which are separated by the 10° N parallel. Majority of the islands (about 550) are in the Andamans group, only 26 of which are inhabited. The Nicobar group comprises of 22 main islands out of which only 10 are inhabited. The geographical area of the territory is 8,249 km^2, constituting 0.25% of total area of the country which lies between latitude 6° N-14°N and longitude 92°E- 94°E. Port Blair, the capital of the territory, is about 1,200 km from the mainland coast.The climate is humid tropical. The average annual rainfall varies from 1,400 mm to 3,000 mm and average annual temperature varies from 24°c to 28° c.

As per *Census 2011*, the total population of the UT is 0.38 million which constitute 0.03% of the country's population. Rural population constitute 64.33% and urban population 35.67%. The population density is 46.06 persons per km^2. The livestock population is 0.17 million *(Livestock Census 2007).*

Land use pattern of the Union Territory is given in Table 9.30.1.

Table 9.30.1: Land Use Pattern

Land Use	Area in '000 ha	Percentage
Total geographical area	825	
Reporting area for land utilization	795	100.00
Forests	717	90.19
Not available for cultivation	25	3.14
Permanent pastures and other grazing lands	6	0.75
Land under misc. tree crops and groves	18	2.26
Culturable wasteland	12	1.51
Fallow lands other than current fallows	3	0.38
Current fallows	1	0.13
Net area sown	13	1.64

Source: Land Use Statistics, Ministry of Agriculture, GOI, 2008-09.

9.30.2 Recorded Forest Area

The recorded forest area of the UT is 7,171 km^2 which is 86.93% of its geographical area. Reserved Forests constitute 40.85% and Protected Forests account for 59.15%. of its total forest area.

9.30.3 Protected Areas

The UT has 9 National Parks and 96 Wildlife Sanctuaries covering an area of 0.15 million ha. which constitutes 18.18% of the UT's geographical area. The protected area network constitutes 20.91% of the recorded forest area. The Great Nicobar Biosphere Reserve, having an area of 88,500 ha, is located in the territory (*Source: WII Dehradun).*

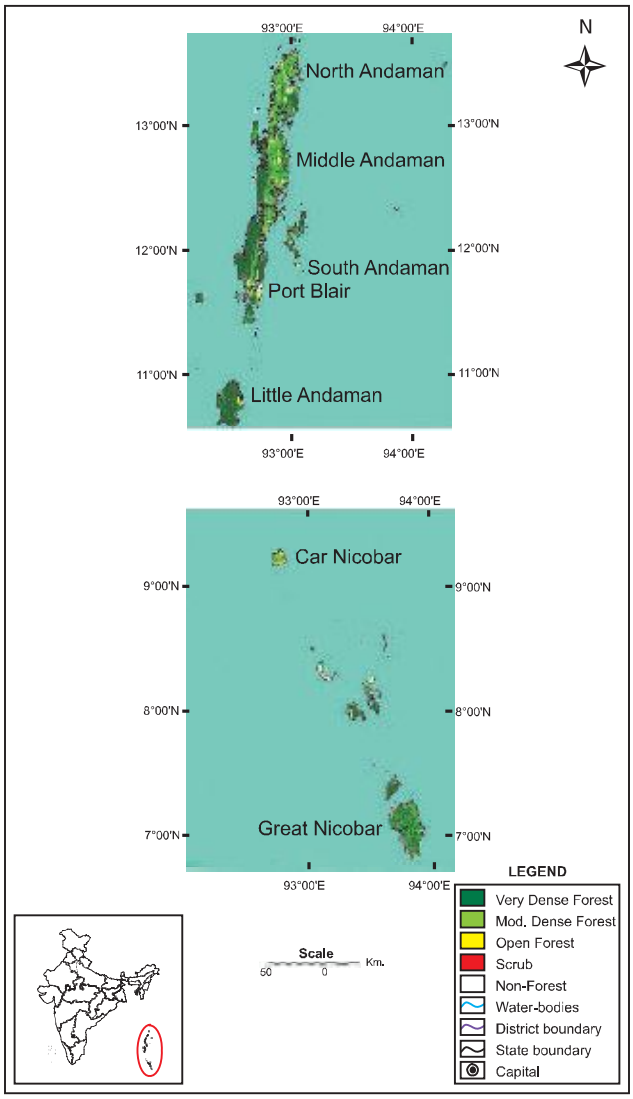
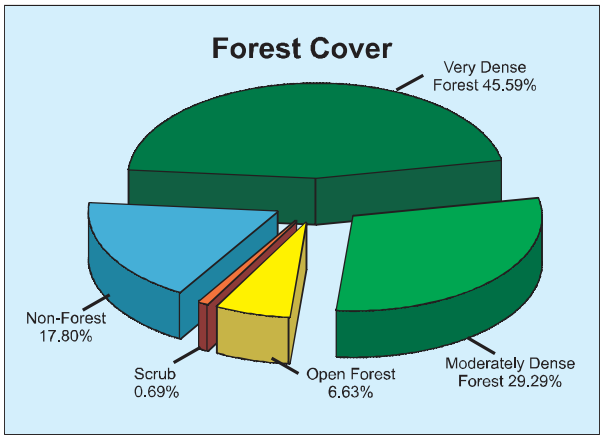


Fig 9.30 Forest cover map of Andaman & Nicobar Islands

9.30.4 Forest Cover

The forest cover in the UT, based on interpretation of satellite data of December 2008 - December 2009 is 6,724 km^2 which works out to 81.51% of the UT's geographical area. In terms of forest canopy density classes, the UT has 3,761 km^2 of area under very dense forests, 2,416 km^2 moderately dense forests and 547 km^2 open forests. The density class- wise distribution of the forest cover of the UT is shown in Fig. 9.30.



Proportion of different forest density classes is depicted in the pie diagram in percentage terms.

District-wise forest cover in different canopy density classes and scrub along with the changes compared to 2009 Assessment are given in Table 9.30.2.

Table 9.30.2: District-wise Forest Cover (Area in km^2)

District	Geographical Area	2011 Assessment				Percent of GA	Change	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Andaman^T	6,408	2937	1990	416	5,343	83.38	30	4
Nicobar^T	1,841	824	426	131	1,381	75.01	32	53
Grand Total	**8,249**	**3,761**	**2,416**	**547**	**6,724**	**81.51**	**62**	**57**

9.30.5 Forest Cover Change

There is net increase of 62 km^2 in the forest cover from the reported area in ISFR 2009. A quantitative account of the class-wise change is given in the forest cover change matrix in Table 9.30.3.

Table 9.30.3: Forest Cover Change Matrix (Area in km^2)

2009 Assessment	2011 Assessment					Total 2009
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	3,757	5	0	0	0	**3,762**
Moderately Dense Forest	4	2,393	1	0	7	**2,405**
Open Forest	0	1	490	0	4	**495**
Scrub	0	0	9	42	2	**53**
Non-Forest	0	17	47	15	1,455	**1,534**
Total 2011	**3,761**	**2,416**	**547**	**57**	**1,468**	**8249**
Change	-1	11	52	4	-66	

Reasons for Change detected in 2011 Assessment

Reasons for change in forest cover as detected during interpretation of satellite data are enumerated hereunder:

The main reasons for the change in forest cover are as under:

a. The forest areas lost during tsunami have recovered and are showing up on satellite imagery.
b. Mangrove areas were found to be extending in Andaman district.

9.30.6 Altitude Zone-wise Forest Cover

Forest cover of the UT in different altitude zones is given in Table 9.30.4

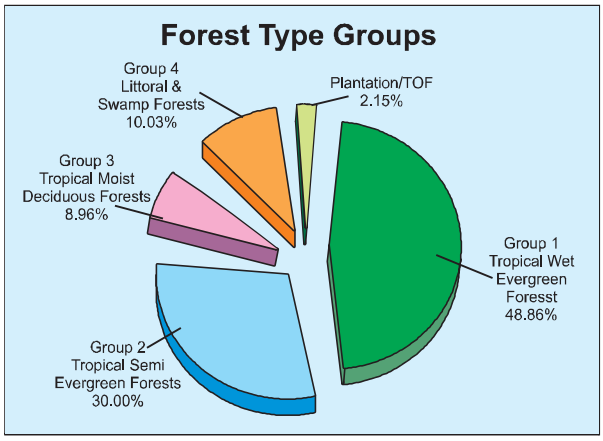
Table 9.30.4: Altitude Zone-wise Forest Cover (Area in km^2)

Altitude Zone	VDF	MDF	OF	Total
0-500m	3,754	2,411	545	6,710
500-1000m	7	5	2	14
Total	**3,761**	**2,416**	**547**	**6,724**

(Based on SRTM, Digital Elevation Model)

9.30.7 Forest Cover in Different Forest Types

Forest type mapping using satellite data has been undertaken by Forest Survey of India with reference to Champion & Seth Classification. As per this assessment, the UT has 13 forest types belonging to four forest type groups, *viz.* Tropical Wet Evergreen, Tropical Semi Evergreen, Tropical Moist Deciduous and Littoral & Swamp Forests. Percentagewise distribution of the forest cover of the UT in various forest type groups is given in the pie diagram.



9.30.8 Tree Cover

Tree cover of the UT has been estimated using sample data of TOF inventory collected over a period of six years, i.e. 2004-10. The estimated tree cover in the UT is 39 km^2 which is 0.47% of its geographical area. The forest and tree cover of the UT is presented in Table 9.30.5.

Table 9.30.5: Forest and Tree Cover (Area in km^2)

Category	Area	% of Geographical Area
Tree Cover	39	0.47
Forest Cover	6,724	81.51
Forest and Tree Cover	**6,763**	**81.98**

9.30.9 Growing Stock

The growing stock in the recorded forest area has been estimated on the basis of the current forest cover map, forest type map and forest inventory data. For trees outside forests (TOF), the same has been estimated using TOF inventory data. It is presented in the Table 9.30.6.

Table 9.30.6: Growing Stock (million cum)

Forest	TOF	Total
53.185	0.666	53.851