

## 9.33 DAMAN and DIU

### 9.33.1 Introduction

Daman and Diu is a Union Territory of India on the Gujarat coast. Daman is located in the Gulf of Cambay and Diu is an island located in the same Gulf. The geographical area of Daman and Diu is 112 km<sup>2</sup>. The average annual rainfall ranges between 2,300 to 4,800 mm and the mean annual temperature ranges between 25°C to 28°C.

The population of the UT is 0.24 million (*Census 2011*) which constitutes 0.02% of the country's population. Of this, rural population is 75.16% and urban population accounts for 24.84%. The population density is 2,168 persons per km<sup>2</sup>. The livestock population of the UT is 7,000 (0.01%) (*Livestock Census 2007*).

Land use pattern of the Union Territory is given in Table 9.33.1.

**Table 9.33.1: Land Use Pattern**

Land Use	Area in '000 ha	Percentage
Total geographical area	11	
Reporting area for land utilization	5	100.00
Not available for cultivation	0	0
Land under misc. tree crops and groves	0	0
Culturable wasteland	0	0
Net area sown	5	100.00

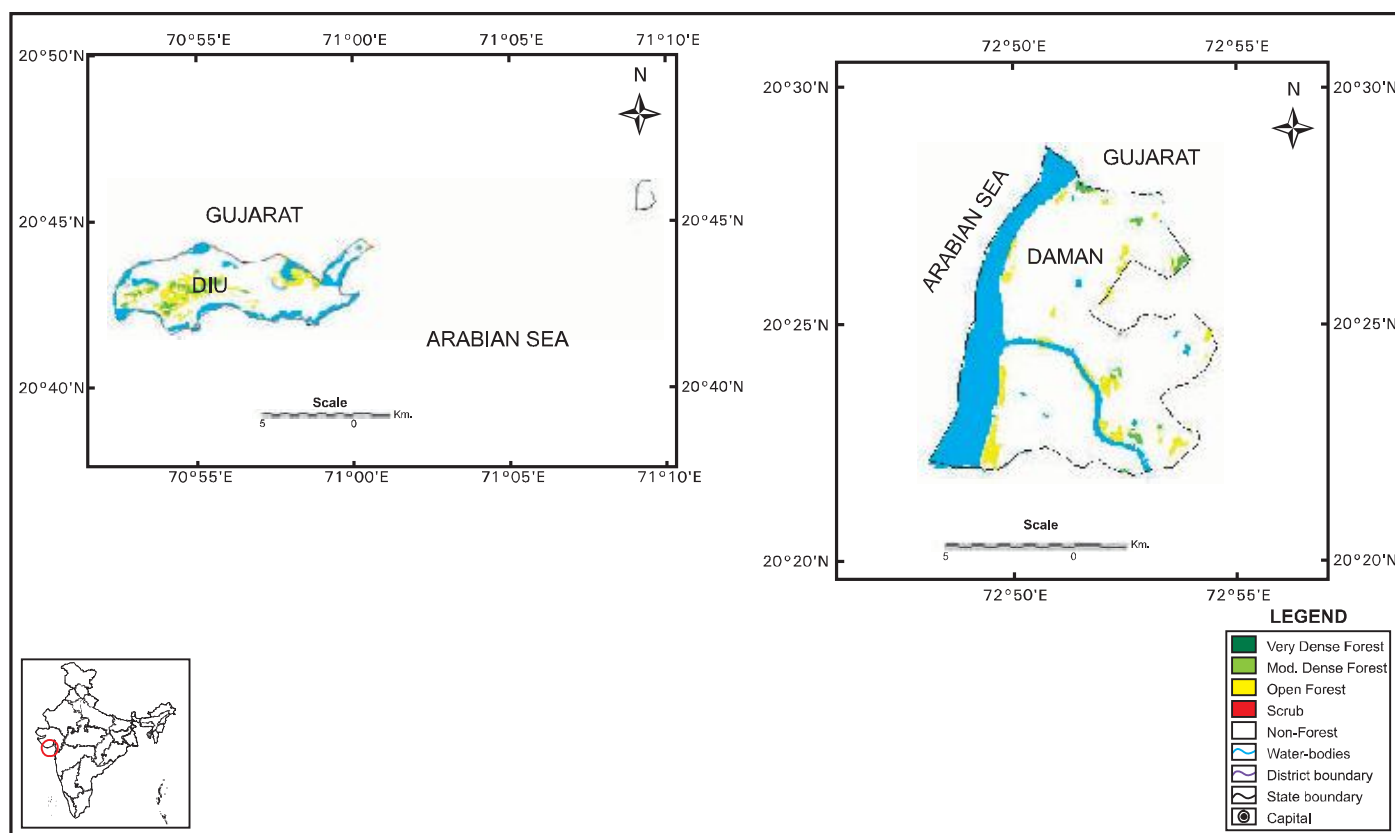
Source: Land Use Statistics, Ministry of Agriculture, GOI, 2008-09.

### 9.33.2 Recorded Forest Area

The recorded forest area of the UT is 8 km<sup>2</sup> which is 7.38% of its geographical area. Reserved Forests constitute 3% and Unclassed Forests account for 97% of the forest area.

### 9.33.3 Protected Area

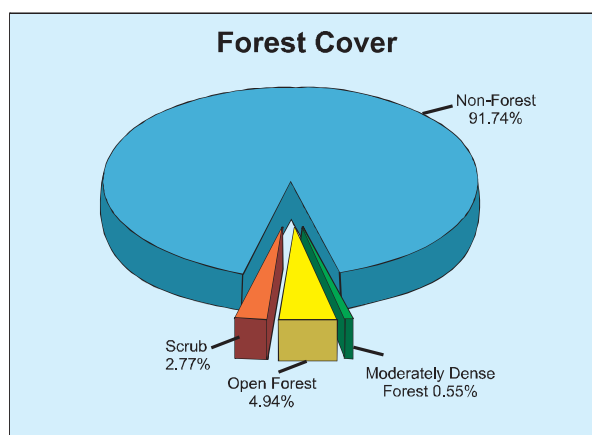
An area of 218 ha is being managed as protected area under one Wildlife Sanctuary, Fudam. This constitutes 1.95% of the UT's geographical area.



**Fig.9.33 Forest cover map of Daman and Diu**

## 9.33.4 Forest Cover

The forest cover in the UT, based on interpretation of satellite data of December 2006, is 6.15 km<sup>2</sup> which is 5.49% of its geographical area. In terms of forest canopy density classes, the UT has 0.62 km<sup>2</sup> area under moderately dense forest and 5.53 km<sup>2</sup> area under open forest. The forest cover of the UT is shown in Fig. 9.33.



## Forest and Tree Resources in States and Union Territories

District-wise forest cover in different canopy density classes and scrub along with the

changes compared to 2009 Assessment are given in Table 9.33.2.

**Table 9.33.2: District-wise Forest Cover** (Area in km<sup>2</sup>)

District	Geographical Area	2011 Assessment				Percent of GA	Change	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Daman <sup>T</sup>	72	0	0.62	3.00	3.62	5.03	0.16	0
Diu	40	0	0	2.53	2.53	6.33	0.34	3.10
<b>Grand Total</b>	<b>112</b>	<b>0</b>	<b>0.62</b>	<b>5.53</b>	<b>6.15</b>	<b>5.49</b>	<b>0.50</b>	<b>3.10</b>

Comparison of the current forest cover assessment with the previous assessment

shows a marginal gain of 0.50 km<sup>2</sup> of forest cover.

**Table 9.33.3: Forest Cover Change Matrix** (Area in km<sup>2</sup>)

2009 Assessment	2011 Assessment					Total 2009
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	0	0	0	0	0	<b>0</b>
Moderately Dense Forest	0	0.62	0	0	0	<b>0.62</b>
Open Forest	0	0	5.03	0	0	<b>5.03</b>
Scrub	0	0	0	3.1	0	<b>3.1</b>
Non-Forest	0	0	0.5	0	102.75	<b>103.25</b>
<b>Total 2011</b>	<b>0</b>	<b>0.62</b>	<b>5.53</b>	<b>3.1</b>	<b>102.75</b>	<b>112</b>
Net Change	0	0	0.50	0	-0.50	

The change matrix given in Table 9.33.3 reveals that there has been an increase of 0.50 km<sup>2</sup> in open forest.

### 9.33.5 Altitude Zone-wise Forest Cover

Forest cover of the UT in different altitude zones is given in Table 9.33.4.

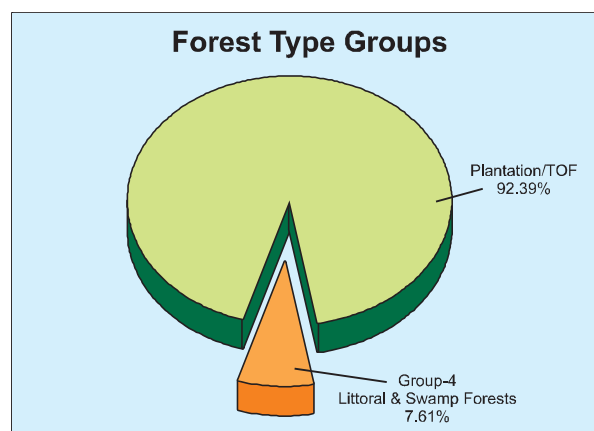
**Table 9.33.4: Altitude Zone-wise Forest Cover** (Area in km<sup>2</sup>)

Altitude Zone	VDF	MDF	OF	Total
0-500m	0	0.62	5.53	6.15
<b>Total</b>	<b>0</b>	<b>0.62</b>	<b>5.53</b>	<b>6.15</b>

(Based on SRTM, Digital Elevation Model)

### 9.33.6 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 one forest type which belongs to Littoral & Swamp forests type group. Percentage-wise distribution of forest cover in forest type group is given in the pie diagram.



### 9.33.7 Tree Cover

Tree cover of the Union Territory has been estimated using TOF inventory data collected over a period of six years, i.e. 2004-10. The

estimated tree cover in the UT is 9 km<sup>2</sup> which is 7.65% of the geographical area of the UT. The forest and tree cover of the UT is presented in Table 9.33.5.

**Table 9.33.5: Forest and Tree Cover** (Area in km<sup>2</sup>)

Category	Area	% of Geographical Area
Tree Cover	9.00	7.65
Forest Cover	6.15	5.49
<b>Forest and Tree Cover</b>	<b>15.15</b>	<b>13.14</b>

### 9.33.8 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 9.33.6.

**Table 9.33.6: Growing Stock** (million cum)

Forest	TOF	Total
0.010	0.108	0.118

## 9.34 LAKSHADWEEP

### 9.34.1 Introduction

The Union Territory of Lakshadweep is located in the Arabian Sea and has a geographical area of 32 km<sup>2</sup>. It consists of a group of 36 coral islands covering 12 atolls, 3 reefs and 5 submerged sand banks. Only 10 islands are inhabited. These islands lie scattered about 280 km to 480 km west of Kochi on Kerala coast between the latitudes of 8° 15' N & 11° 45' N and the longitudes of 72° E & 74° E. The mean annual temperature varies

from 23°C to 35°C. Average rainfall ranges between 1,000 mm and 2,000 mm.

As per *Census 2011*, the total population of the UT is 64,429 of which the rural population constitutes 21.92% and urban population 78.08%. The population density is 2013 persons per km<sup>2</sup>. The livestock population is 82,000 (*Livestock Census 2007*).

Land use pattern of the Union Territory is given in Table 9.34.1.

**Table 9.34.1: Land Use Pattern**

Land Use	Area in '000 ha	Percentage
Total geographical area	3.00	
Reporting area for land utilization	3.00	100.00
Forest	0	0
Not available for cultivation	0	0
Net area sown	3.00	100.00

Source: *Basic Statistics 1993-94. Department of Planning & Statistics, Lakshadweep.*

### 9.34.2 Recorded Forest Area

The Union Territory is devoid of any natural forests. The islands are covered with coconut trees. There is no recorded forest area.

### 9.34.3 Protected Areas

There is only one Wildlife Sanctuary (Pitti), covering an area of 1 ha.

### 9.34.4 Forest Cover

The forest cover in the UT, based on interpretation of satellite data of January 2009 February 2009, is 27.06 km<sup>2</sup> which is 84.56% of its geographical area. In terms of forest canopy density classes, the UT has 17.18 km<sup>2</sup> area under moderately dense forest and 9.88 km<sup>2</sup> area under open forest. The forest cover of the UT is shown in Fig. 9.34.