

8.11 JAMMU AND KASHMIR

8.11.1 Introduction

Jammu & Kashmir the northernmost State of the country, sharing international borders with Pakistan and China, has a geographic area of 22.22 million ha of which 12.08 million ha is under illegal occupation of Pakistan and China. It lies between lat 32°17' and 37°05' N and long 72°31' and 80°20' E. The State is divided into three geographic regions, viz., Leh, Kashmir Valley and Jammu. The higher regions are covered by Pir Panjal, Karakoram and Inner Himalayan ranges of mountains. The important rivers of the State are Chenab, Ravi and Jhelum. Land use pattern of the State is given in the Table 8.11a.

Of the geographic area (1,01,388 km²) under Indian possession, about 59% is under permanent snow cover, glaciers and cold desert where it is not possible to grow trees due to physical limitations.

The annual rainfall and temperature in the State range between 600 to 800 mm and sub zero to 40° C respectively.

The total population of the State is 10.07 million (*Census 2001*) of which 75.12% is rural and 24.88% is urban. Population density is 45 persons per km². The total livestock population is 9.90 million (*Livestock Census 2003*).

8.11.2 Forest Resources

The recorded forest area is 20,230 km² which is 9.10% of the geographic area of the State. By legal status, Reserved Forests constitute 87.21%, Protected Forests,

12.61%, and Unclassed Forests, 0.18%. Forests are largely distributed in Kashmir Valley and Jammu region. Leh and Kargil being cold deserts are devoid of forest vegetation.

There are five forest types occurring in the State, viz., Sub-tropical Dry Evergreen, Himalayan Moist Temperature, Himalayan Dry Temperature, Sub-tropical Pine, Sub-alpine, and Alpine forests.

8.11.3 Protected Areas

There are 4 National Parks and 15 Wildlife Sanctuaries, covering an area of 14,242.50 km², which constitutes 6.41 % of the geographic area. Dachigam National Park is of special significance due to Project Hangul which started in 1970. Wular lake, situated in Baramulla district, covering an area of 8,900 ha, is one of the wetlands of international importance, and has been designated as a Ramsar site.

8.11.4 Joint Forest Management

Joint Forest Management began in the State in 1990. JFM is to cover degraded forests and waste Khalsa land. The members are entitled to get a share of 25% of the net proceeds from the first major harvest of the plantation; and also collect grass, fodder, dry and fallen wood etc. free of cost. There are 2,697 JFM committees managing 114,182 ha as on March 2004 which is about 5.64 % of the forest area of the State.

Source: Handbook of Forest Statistics, J&K Forest Department, 2006.

Table 8.11a: Land use pattern

Land Use	Area in '000 ha	Percentage
Total geographical area	22,224	
Reporting area for land utilization (o)	4505	100.00
Forests (k)	2747	60.98
Not available for cultivation	582	12.92
Permanent pastures and other grazing lands	126	2.80
Land under misc. tree crops & groves	72	1.60
Culturable wasteland	140	3.11
Fallow lands other than current fallows	8	0.18
Current Fallows	81	1.80
Net area sown	784	17.40
(o) : Excludes area under the illegal occupation of China and Pakistan		
(k) : Includes forest area of 2089 thousand hectares reported by the Chief Conservator of Forests of the States in 1983-84		

Source: Land Use Statistics, Ministry of Agriculture, GOI, 2005.

8.11.5 Forest Cover

The forest cover of the State, based on satellite data of September-December 2004, is 21,273 km², which constitutes 9.57% of the total geographic area. Very dense forest is 2,135 km², moderately dense forest is 8,394 km², and open forest, 10,744 km². The forest cover of the State is shown in Fig. 8.11.

There has been no change in the total forest cover and its density as compared to the previous assessment (based on satellite data of September-December 2002 & February 2003).

The district wise details of very dense forest, moderately dense forest, open forest and scrub, along with the changes compared to 2003 assessment, have been provided in Table 8.11b.

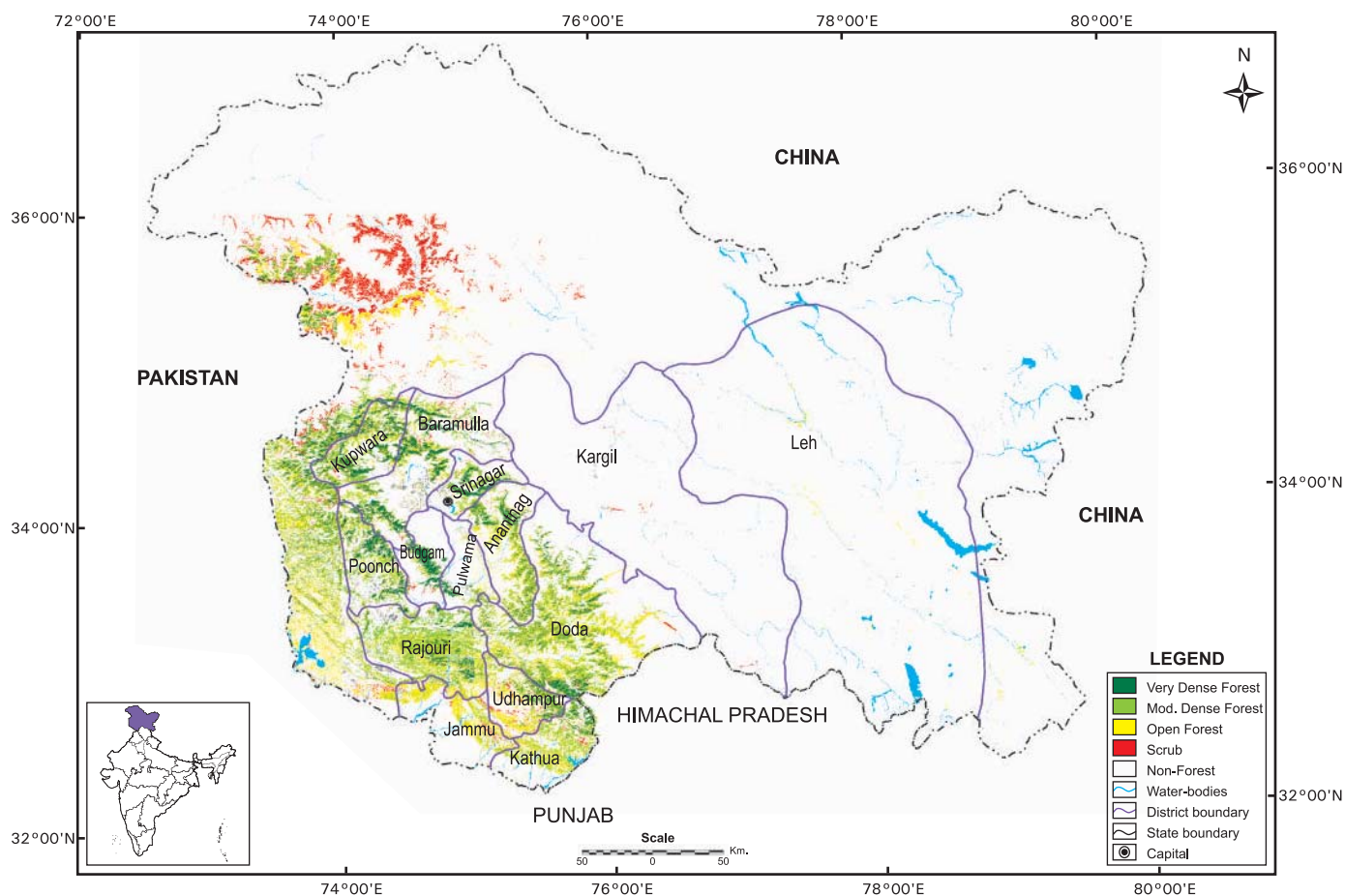
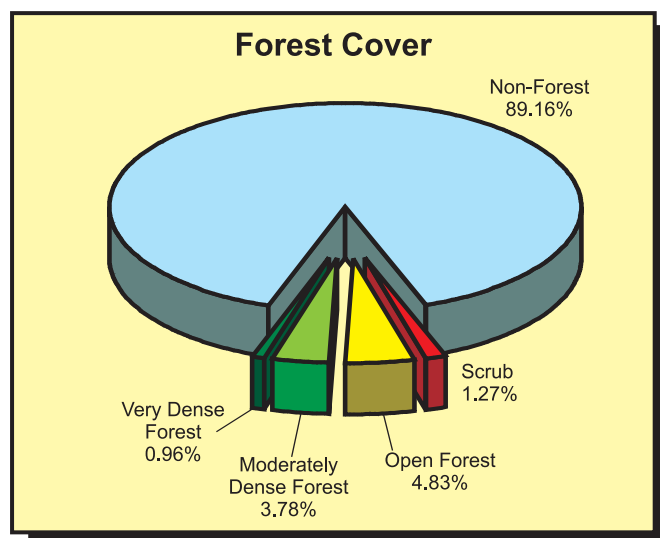


Fig 8.11 : Forest Cover Map of Jammu and Kashmir

Table 8.11b: District-wise forest cover

Number of Districts: 14

(area in km²)

District	Geographic area	2005 Assessment				Percent of G.A.	Change	Scrub
		Very dense forest	Mod. dense forest	Open forest	Total			
Anantnag ^H	3,984	145	621	708	1,474	37.00	0	0
Baramulla ^H	4,588	154	586	687	1,427	31.10	0	43
Budgam ^H	1,371	27	174	82	283	20.64	0	41
Doda ^H	11,691	456	1,575	1,954	3,985	34.09	0	18
Jammu ^H	3,097	7	157	659	823	26.57	0	40
Kargil ^H	14,037	0	2	23	25	0.18	0	10
Kathua ^H	2,651	78	508	562	1,148	43.30	0	20
Kupwara ^H	2,379	92	787	385	1,264	53.13	0	23
Leh ^H	45,110	0	0	119	119	0.26	0	1
Outside of Line of Control ^H	120,848	542	2,066	3,052	5,660	4.68	0	2,522
Poonch ^H	1,674	125	353	249	727	43.43	0	1
Pulwama ^H	1,398	5	94	72	171	12.23	0	0
Rajouri ^H	2,630	220	497	567	1,284	48.82	0	4
Srinagar ^H	2,228	30	327	372	729	32.72	0	15
Udhampur ^H	4,550	254	647	1253	2,154	47.34	0	83
Total	222,236	2,135	8,394	10,744	21,273	9.57	0	2,821

8.11.6 Tree Cover

Tree cover of Jammu & Kashmir has been estimated following a sampling based approach. A separate exercise was carried out where high resolution satellite data (5.8m) has

been used for identification of tree patches for field inventory. The estimated tree cover in the State is 5,633 km².

The forest and tree cover of the State is presented in the Table 8.11c.

Table 8.11c: Forest & tree cover

(area in km²)

Category	Area	% of Geographical Area
Tree Cover	5,633	2.53
Forest Cover	22,591	28.34
Forest & Tree Cover	28,224	30.87