



7.24
SIKKIM

Geographical Area	7,096 sq km
Population (as per Census 2011)	0.611 million
Urban	0.145 million (25.20%)
Rural	0.457 million (74.80%)
Tribal	0.206 million (33.72 %)
Average Population Density	86 per sq km
Livestock population (as per 18th Live Stock Census)	0.270 million
No. of Districts (as per Census 2001)	4
No. of Hill Districts	4
No. of Tribal Districts	4

Land Use Pattern

Land Use	Area in '000 ha	Percentage
Total Geographical Area	710	
Reporting area for land utilization	693	100
Forests	584	84.31
Not available for cultivation	11	1.54
Permanent pastures and other grazing lands	0	0
Land under Misc. Tree crops and groves	8	1.13
Culturable wasteland	3	0.48
Fallow lands other than current fallows	4	0.65
Current fallows	5	0.72
Net area sown	77	11.17

Source: Landuse Statistics, Ministry of Agriculture, GOI, 2012-13.

Forest Cover Within Green Wash

Very Dense Forest	390 sq km
Moderately Dense Forest	1,323 sq km
Open Forest	252 sq km
Sub Total	1,965 sq km

Forest Cover Outside Green Wash

Very Dense Forest	110 sq km
Moderately Dense Forest	837 sq km
Open Forest	445 sq km
Sub Total	1,392 sq km
Total Forest Cover	3,357 sq km
Tree Cover	35 sq km
Total Forest & Tree Cover	3,392 sq km
Per capita Forest & Tree Cover	0.556 ha
Of State's Geographical Area	47.80 %
Of India's Forest & Tree Cover	0.43 %

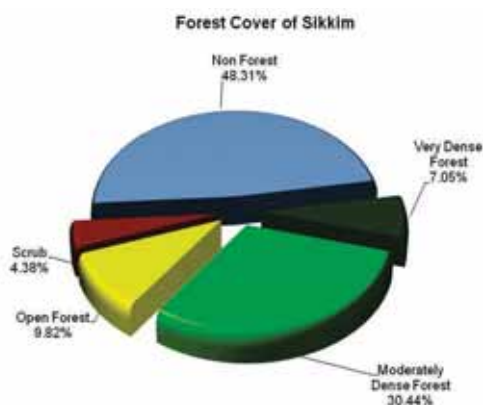
Forest Cover Informatics in Different Patch Size Class

S.No.	Patch Size Range in (sq km)	No. of Patches	Area (sq km)	%age
1.	<= 0.01 <=1.0	647	41	1.22
2.	> 1.0 <= 10	10	23	0.68
3.	> 10 <= 100	2	109	3.24
4.	> 100 <= 500	0	0	0.00
5.	> 500 <= 1000	0	0	0.00
6.	> 1000 <= 5000	1	3,184	94.86
7.	> 5000 <= 10000	0	0	0.00
8.	> 10000	0	0	0.00
	Total	660	3,357	100

Forest Types

Forest Type	Area	Percent
3C/C1a (i) East Himalayan Sal	40.29	1.11
3C/C3b East Himalayan Moist Mixed Deciduous Forest	146.44	4.04
8B/C1 East Himalayan Subtropical Wet Hill Forest	911.89	25.15
11B/C1b Buk Oak Forest	898.17	24.78
12/C3a East Himalayan Mixed Coniferous Forest	232.63	6.42
12/DS1 Montane Bamboo Brakes	1.05	0.03
14/C2 East Himalayan Sub-Alpine Birch/Fir Forest	978.63	27.00
15/C1 Birch/Rhododendron Scrub	139.63	3.85
15/E1 Dwarf Rhododendron Scrub	55.38	1.53
15/E2 Dwarf Juniper Scrub	149.08	4.11
Plantation/TOF	71.81	1.98
Total	3,625.00	100.00

Source: Atlas Forest Types of India, 2011



Growing Stock

Growing Stock in Recorded Forest Area	25.28 million cum
Growing Stock in TOF	2.04 million cum

Recorded Forest Area

Reserved Forest	5,452 sq km
Protected Forest	389 sq km
Unclassed Forest	0 sq km
Total	5,841 sq km
Of State's Geographical Area	82.31 %
Of India's Forest Area	0.76 %

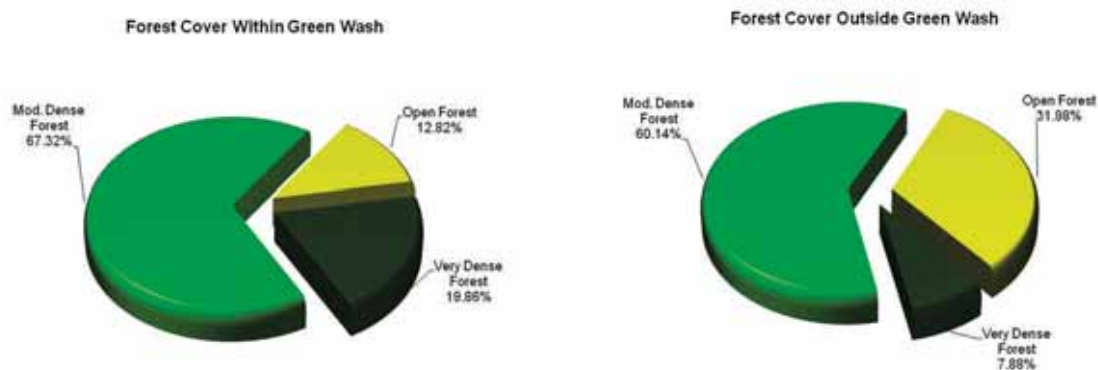


Table 7.24a: District-wise Forest Cover of Sikkim

District-wise Forest Cover								(Area in km ²)
District	Geo-graphical Area	Very Dense Forest	Mod. Dense Forest	Open Forest	Total	Percent of GA	Change	Scrub
East Sikkim TH	954	162	411	126	699	73.27	0	67
West Sikkim TH	1,166	110	489	173	772	66.21	0	42
North Sikkim TH	4,226	135	889	291	1,315	31.12	-1	198
South Sikkim TH	750	93	371	107	571	76.13	0	4
Total	7,096	500	2,160	697	3,357	47.31	-1	311

Figure 7.24: Forest Cover Map of Sikkim

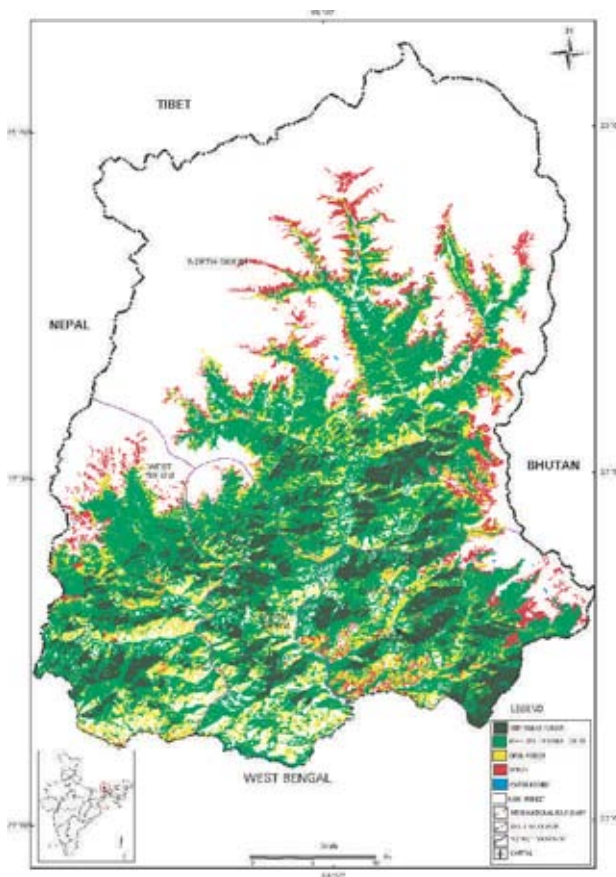


Table 7.24b Change Matrix of Sikkim

Forest Cover Change Matrix (Area in km²)

Class	2015 Assessment					Total ISFR 2013
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	500	0	0	0	0	500
Moderately Dense Forest	0	2,160	0	0	1	2,161
Open Forest	0	0	697	0	0	697
Scrub	0	0	0	311	0	311
Non-Forest	0	0	0	0	3,427	3,427
Total ISFR 2015	500	2,160	697	311	3,428	7,096
Net Change	0	-1	0	0	1	

Table 7.24c : Altitude-wise Forest Cover of Sikkim

Altitude-wise Forest Cover (Area in km²)

Altitude Zone	VDF	MDF	OF	Total
0-500	0	25	12	37
500-1000	5	158	93	256
1000-2000	184	643	265	1,092
2000-3000	297	682	106	1,085
3000-4000	14	610	151	775
>4000	0	42	70	112
Total	500	2,160	697	3,357

(Based on SRTM, Digital Elevation Model)

Reasons for change detected in 2015 assessment:

The main reasons for decrease in forest cover are road construction, shifting cultivation and landslides.