

## 7.2 ARUNACHAL PRADESH

<b>Geographical Area</b>	83,743 sq km
<b>Population (as per Census 2011)</b>	1.38 million
Urban	0.32 million (22.94%)
Rural	1.06 million (77.06%)
Tribal	0.95 million (68.79%)
<b>Average Population Density</b>	17 per sq km
<b>Livestock population</b> (as per 18th Live Stock Census)	1.41 million
<b>No. of Districts</b> (as per Census 2001)	13
<b>No. of Hill Districts</b>	13
<b>No. of Tribal Districts</b>	13

### Land Use Pattern

Land Use	Area in '000 ha	Percentage
Total Geographical Area	8,374	
Reporting area for land utilization	5,659	100
Forests	5,154	91.07
Not available for cultivation	64	1.13
Permanent pastures and other grazing lands	19	0.33
Land under Misc. Tree crops and groves	37	0.65
Culturable wasteland	65	1.15
Fallow lands other than current fallows	70	1.23
Current fallows	40	0.71
Net area sown	211	3.73

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

### Forest Cover Within Green Wash

Very Dense Forest	13,158 sq km
Moderately Dense Forest	20,586 sq km
Open Forest	9,739 sq km
<b>Sub Total</b>	<b>43,483 sq km</b>

### Forest Cover Outside Green Wash

Very Dense Forest	7,646 sq km
Moderately Dense Forest	10,715 sq km
Open Forest	5,404 sq km
<b>Sub Total</b>	<b>23,765 sq km</b>
<b>Total Forest Cover</b>	<b>67,248 sq km</b>
<b>Tree Cover</b>	<b>761 sq km</b>
<b>Total Forest &amp; Tree Cover</b>	<b>68,009 sq km</b>
Per capita Forest & Tree Cover	4.93 ha
Of State's Geographical Area	81.21%
Of India's Forest & Tree Cover	8.56 %

\*Five toposheets of 1:250,000 scale were not available and corresponding green wash area could not be digitized.

### 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	9,066	540	0.80
2.	> 1.0 <= 10	143	347	0.52
3.	> 10 <= 100	13	254	0.38
4.	> 100 <= 500	1	101	0.15
5.	> 500 <= 1000	0	0	0.00
6.	> 1000 <= 5000	1	1,206	1.79
7.	> 5000 <= 10000	0	0	0.00
8.	> 10000	1	64,800	96.36
	<b>Total</b>	<b>9,225</b>	<b>67,248</b>	<b>100</b>

### Forest Types

(Area in km<sup>2</sup>)

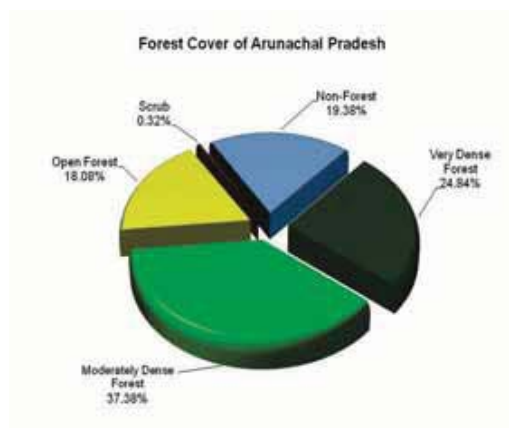
Forest Type	Area	Percent
3B/C2 Southern Moist Mixed Deciduous Forest	2,214.44	4.08
4A/L1 Littoral Forest	22.34	0.04
4B/TS2 Mangrove Forest	288.01	0.53
5A/C1b Dry Teak Forest	6,031.79	11.12
5A/C2 Dry Red Sanders-Bearing Forest	788.21	1.46
5A/C3 Southern Dry Mixed Deciduous Forest	30,130.64	55.56
5B/C2 Northern Dry Mixed Deciduous Forest	0.95	0
5/DS1 Dry Deciduous Scrub	9,626.25	17.75
5/DS2 Dry Savannah Forest	72	0.13
5/E4 <i>Hardwickia</i> Forest	0.83	0
5/E9 Dry Bamboo Brakes	377.33	0.7
5/2S1 Secondary Dry Deciduous Forest	1,115.21	2.06

**Forest Types**

(Area in km<sup>2</sup>)

Forest Type	Area	Percent
6A/C1 Southern Thorn Forest	2,349.67	4.33
6A/C2 Karnatak Umbrella Thorn Forest	101.32	0.19
7/C1 Tropical Dry Evergreen Forest	528.06	0.97
Plantation / TOF	586.95	1.08
<b>Total</b>	<b>54,234.00</b>	<b>100</b>

Source: Atlas Forest Types of India, 2011

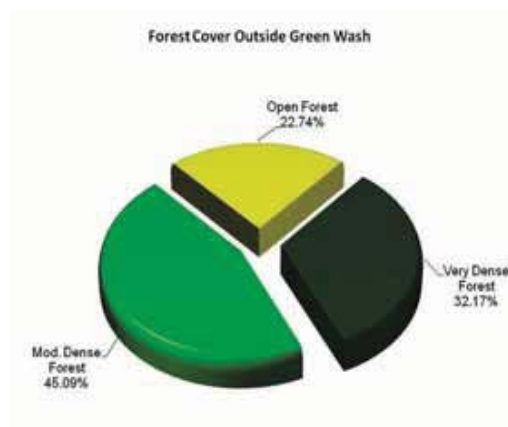
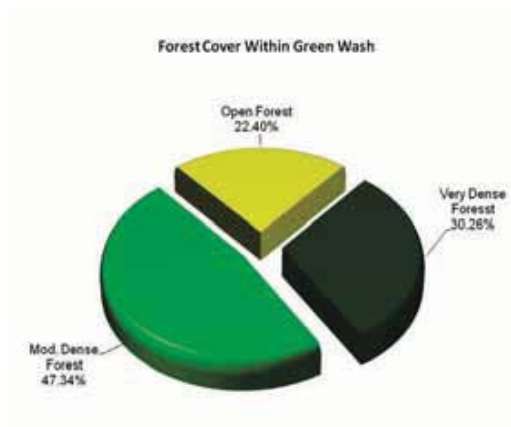


**Growing Stock**

Growing Stock in Recorded Forest Area	413.12 million cum
Growing Stock in TOF	89.10 million cum

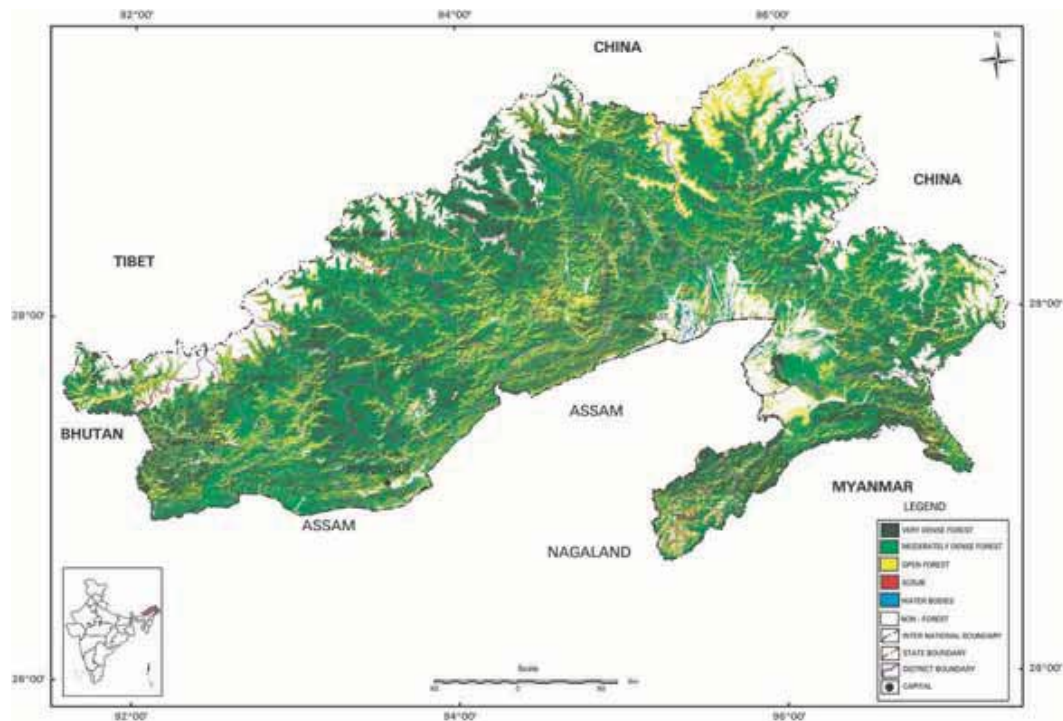
**Recorded Forest Area**

Reserved Forest	10,589 sq km
Protected Forest	9,779 sq km
Unclassed Forest	31,039 sq km
<b>Total</b>	<b>51,407 sq km</b>
Of State's Geographical Area	61.39 %
Of India's Forest Area	6.72 %





**Figure 7.2:** Forest Cover Map of Arunachal Pradesh



**Table 7.2a :** District-wise Forest Cover of Arunachal Pradesh

District-wise Forest Cover									(Area in km <sup>2</sup> )
District	Geo-graphical Area	Very Dense Forest	Mod. Dense Forest	Open Forest	Total	Percent of GA	Change w.r.t. ISFR 2013	Scrub	
Changlang <sup>TH</sup>	4,662	1,860	1,445	924	4,229	90.71	-2	3	
Dibang Valley <sup>TH</sup>	13,029	1,696	4,973	2,652	9,321	71.54	-1	9	
Kameng East & Kameng West <sup>TH</sup>	11,556	3,422	4,653	2,145	10,220	88.44	-25	37	
Lohit <sup>TH</sup>	11,402	1,962	4,008	1,624	7,594	66.60	-17	13	
Popumpare <sup>TH</sup>	3,462	990	1,542	701	3,233	93.39	-12	3	
Siang East <sup>TH</sup>	3,655	881	1,253	704	2,838	77.65	21	15	
Siang Upper <sup>TH</sup>	7,050	1,634	2,612	1,363	5,609	79.56	-13	16	
Siang West <sup>TH</sup>	7,813	2,470	2,708	1,592	6,770	86.65	2	6	
Subansiri Lower <sup>TH</sup>	9,548	3,002	4,236	1,419	8,657	90.67	-19	27	
Subansiri Upper <sup>TH</sup>	7,032	1,876	2,742	1,187	5,805	82.55	-9	28	
Tawang <sup>TH</sup>	2,172	366	486	374	1,226	56.45	0	18	
Tirap <sup>TH</sup>	2,362	645	643	458	1,746	73.92	2	89	
<b>Grand Total</b>	<b>83,743</b>	<b>20,804</b>	<b>31,301</b>	<b>15,143</b>	<b>67,248</b>	<b>80.30</b>	<b>-73</b>	<b>264</b>	

**Table 7.2b :** Change Matrix of Arunachal Pradesh

<b>Forest Cover Change Matrix</b> (Area in km <sup>2</sup> )						
Class	2015 Assessment					Total ISFR 2013
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	2,0804	0	0	0	24	20,828
Moderately Dense Forest	0	31,293	0	0	121	31,414
Open Forest	0	0	14,876	0	203	15,079
Scrub	0	0	0	120	1	121
Non Forest	0	8	267	144	15,882	16,301
<b>Total ISFR 2015</b>	<b>20,804</b>	<b>31,301</b>	<b>15,143</b>	<b>264</b>	<b>16,231</b>	<b>83,743</b>
Net Change	-24	-113	64	143	-70	

**Table 7.2c :** Altitude-wise Forest Cover of Arunachal Pradesh

<b>Altitude-wise Forest Cover</b> (Area in km <sup>2</sup> )				
Altitude Zone	VDF	MDF	OF	Total
0-500m	1,593	3,492	2,165	7,250
500-1000m	2,828	4,178	3,281	10,287
1000-2000m	7,743	10,167	4,634	22,544
2000-3000m	6,465	9,102	1,730	17,297
3000-4000m	2,139	4,132	2,911	9,182
>4000m	36	230	422	688
<b>Total</b>	<b>20,804</b>	<b>31,301</b>	<b>15,143</b>	<b>67,248</b>

(Based on SRTM, Digital Elevation Model)

### Reasons for change detected in 2015 assessment:

The main reasons of negative change in forest cover of the state are shifting cultivation and diversion of forest areas for developmental purposes. Positive changes in some districts are due to regeneration of Bamboo and other miscellaneous species.

