

Tripura

9.27.1 Introduction

Tripura is situated in the northeastern part of the country covering an area of 10,486 sq km which is 0.32% of the geographical area of the country. Tripura has a moist and humid climate. The average annual rainfall varies from 2,250mm to 2,500mm and the minimum and maximum temperature ranges between 21°C and 38°C in summer and 4°C and 33°C in winter. The main rivers flowing through the State are Khowai, Dhalai, Manu and Deo. The state has 4 districts, all of which are hilly as well as tribal. As per the 2011 census, Tripura has a population of 3.67 million accounting to 0.30% of India's population. The State has urban, rural and tribal population of 26.17%, 73.83% and 31.76% respectively. The average population density of the state is 350 per sq km, which is lower than the national average of 382 persons per sq km. The Livestock population of the State as per 19th Live Stock Census, 2012 is 1.94 million.

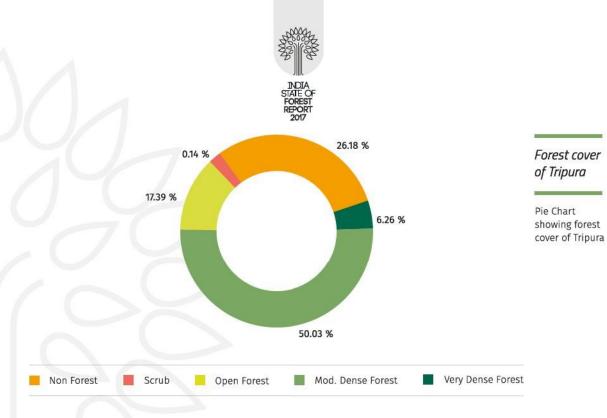
Land Use Types	Area (in 000' ha)	Percentage
Total Geographic Area	1,049	
Reporting area for land utilization	1,049	100.00
Forests	629	59.96
Not available for land cultivation	145	13.82
Permanent pastures and other grazing lands	1	0.10
Land under misc. tree crops and groves	12	1.14
Culturable wasteland	3	0.29
Fallow land other than current fallows	2	0.19
Current fallows	2	0.19
Net area sown	255	24.31

Source: Land Use Statistics, Ministry of Agriculture, GOI, 2013-14.

9.27.2

Forest Cover

Based on interpretation of satellite data pertaining to Oct-Dec 2015, the Forest Cover in the State is 7,726 sq km, which is 73.68% of the State's geographical area. In terms of forest canopy density classes, the state has 656 sq km under very dense forest, 5,246 sq km under moderately dense forest and 1,824 sq km under open forest.



9.27.3

Forest Cover within and outside Green Wash Area

The State has reported a recorded forest area of 6,294 sq kmwhich is 60.02% of its geographical area. The Reserved, Protected and Unclassed Forests are 66.33%, 0.03% and 33.64% respectively of recorded forest area. Due to non-availability of digitized boundary of recorded forest area from the State, the updated green wash area which is 7,765 sq km has been used and the analysis of forest cover within this area is depicted below.

Forest Cover within Green Wash (Area in sq km)	
Very Dense Forest (VDF)	546
Moderately Dense Forest (MDF)	4,510
Open Forest (OF)	1,393
Total	6,449
Forest Cover outside Green Wash	
Very Dense Forest	110
Moderately Dense Forest	736
Open Forest	431
Total	1,277
Total Forest Cover	7,726
Tree Cover	215
Total Forest & Tree Cover	7,941
Of State's Geographical Area	75.73%
Of India's Forest & Tree Cover	0.99%
Per capita Forest & Tree Cover	0.22 ha



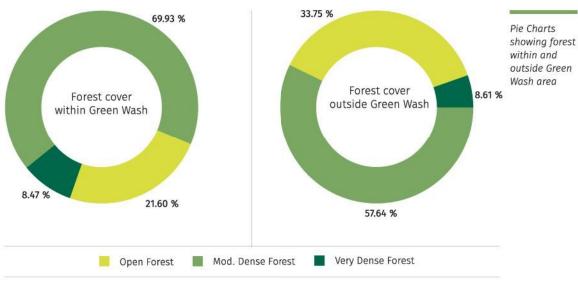


Table 9.27.3 Altitude-wise Forest Cover (Area in sq km)						
Altitude Zone (m)	Geographical Area	VDF	MDF	OF	Total	
0-500	10,420	656	5,200	1,807	7,663	
500-1000	66	0	46	17	63	
Total	10,486	656	5,246	1,824	7,726	

(Based on SRTM, Digital Elevation Model)

S.No.	Patch Size Range (sq km)	No. of Patches	Area (sq km)	%age
1.	≥ 0.01 ≤ 1.0	3,316	253	3.27
2.	> 1.0 ≤ 10	81	211	2.73
3.	> 10 ≤ 100	5	140	1.81
4.	> 100 ≤ 500	2	363	4.70
5.	> 500 ≤ 1000	0	0	0.00
6.	> 1000 ≤ 5000	0	0	0.00
7.	> 5000 ≤ 10000	1	6,759	87.49
	Total	3,405	7,726	100

Table 9.27.5 Growing Stock		
	Growing Stock	% Contribution to country
Growing Stock in Recorded Forest Area	21.740 m cum	0.52
Growing Stock in TOF	6.498 m cum	0.41
Potential Production of industrial wood from TOF	0.21 m cum	0.28
Bamboo bearing area within forest area of the state	3,617 sq km	2.31
Total number of culms	797 millions	2.84
Total green weight equivalent of culms	6,494 (000' tonnes)	3.44



9.27.4

Carbon Stock in forest

The total Carbon stock of forests in the State is 63.408 million tonnes (232.496 million tonnes of CO_2 equivalent) which is 0.90% of total forest carbon of the country.

9.27.

Decadal Change in water bodies within Forest

An increase of 36 sq km has been observed in the water body coverage within Forest compared to 2005. The graphical and tabular comparison is depicted below.

Extent of water bodies within forest

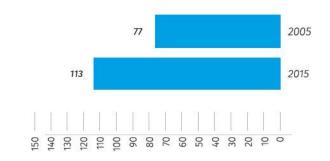


Table 9.27.6 Water bodies within Forest for the years 2005 and 2015							
Area/Coverage	2005	2015					
Extent of water bodies (sq km) within Forest	77	113					
% of water bodies to Forest Cover 0.94 1.46							

Table 9.27.7 District- wise Forest Cover							(area in sq km)		
District	Geo-graphical Area	20	2017 Assessment %of GA				Change *	Scrub	
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total				
Dhalai™	2,400	116	1,467	397	1,980	82.50	- 26		
North Tripura [™]	2,036	50	1,054	374	1,478	72.59	14	12	
South Tripura [™]	3,057	241	1,583	453	2,277	74.48	-111	C	
West Tripura [™]	2,993	249	1,142	600	1,991	66.52	-41	2	
Grand Total	10,486	656	5,246	1,824	7,726	73.68	-164	15	

^{*}Change compared to updated 2015 assessment.



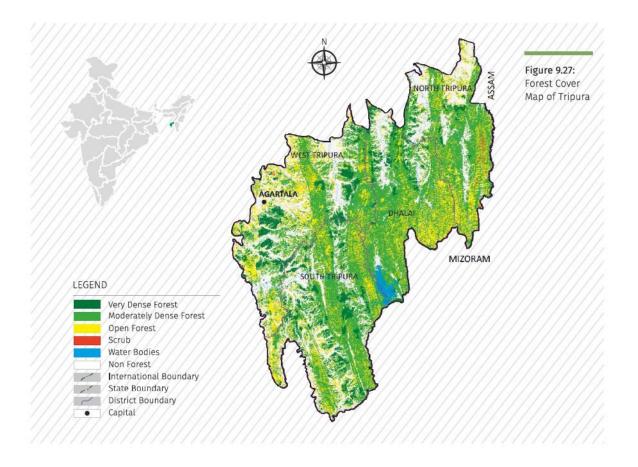


Table 9.27.8 Forest Cover	(area in sq km)					
Class		2017 Assessment				
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	80	23	3	0	4	110
Moderately dense Forest	392	3,672	427	1	177	4,669
Open Forest	184	1,442	1,237	7	241	3,111
Scrub	0	16	26	5	9	56
Non Forest	0	93	131	2	2,314	2,540
Total ISFR 2017	656	5,246	1,824	15	2,745	10,486
Net Change	546	577	- 1,287	-41	205	

9.27.6

Reasons for change detected in 2017 assessment

A net decrease of 164 sq km in the forest cover of the State can be attributed to shifting cultivation, harvesting of mature rubber plantations and other development activities. In some cases, positive change due to extension of area under rubber plantation has also been observed.