

13.26

TRIPURA



Geographical Area
10,486 sq km

Geographical Coordinates
Latitude- 22° 57' N to 24° 32' N
Longitude- 91° 10' E to 92° 20' E

Population (as per Census 2011)
3.67 million
Urban 0.96 million (26.17 %)
Rural 2.71 million (73.83 %)
Tribal 1.17 million (31.76 %)

Average Population Density
350 per sq km

Livestock population
(as per 19th Live Stock Census)
1.94 million

No. of Districts
4

No. of Hill Districts
4

No. of Tribal Districts
4

Table 13.26.1 Land Use Pattern

Land Use Types	Area (in '000 ha)	Percentage
Geographical Area	1,049	
Reporting area for land utilization	1,049	100.00
Forests	629	59.96
Not available for land cultivation	148	14.11
Permanent pastures and other grazing lands	1	0.10
Land under misc. tree crops and groves	10	0.95
Culturable wasteland	3	0.28
Fallow land other than current fallows	2	0.19
Current fallows	1	0.10
Net area sown	255	24.31

Source: Land Use Statistics, Ministry of Agriculture, GOI, (2017-18)

13.26.1 Forest Cover

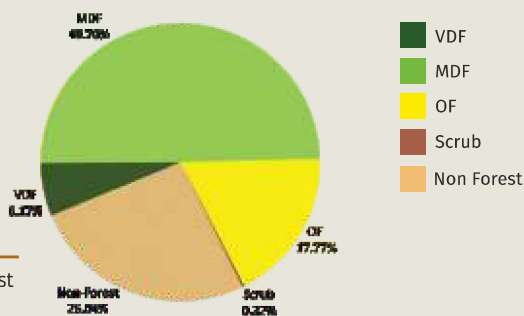


Figure 13.26.1 Forest Cover of Tripura

Table 13.26.2 Forest Cover of Tripura (in sq km)

Class	Area	% of GA
VDF	646.76	6.17
MDF	5,211.76	49.70
OF	1,863.00	17.77
Total	7,721.52	73.64
Scrub	33.22	0.32

Table 13.26.3 District-wise Forest Cover in Tripura (in sq km)

District	Geo-graphical Area (GA)	2021 Assessment				%of GA	Change wrt 2019 assessment	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Dhalai TH	2,400	117.71	1,453.00	406.44	1,977.15	82.38	-6.55	2.55
North Tripura TH	2,036	48.52	1,044.60	387.57	1,480.69	72.73	0.50	18.21
South Tripura TH	3,057	235.28	1,571.31	455.23	2,261.82	73.99	-10.38	0.10
West Tripura TH	2,993	245.25	1,142.85	613.76	2,001.86	66.88	12.36	12.36
Grand Total	10,486	646.76	5,211.76	1,863.00	7,721.52	73.64	-4.07	33.22

13.26.1.1 Forest Cover Inside and Outside Recorded Forest Area (or Green Wash)

The Forest Cover inside and outside Recorded Forest Area (RFA) has been analysed in different categories and presented in Table given below.

Table 13.25.4 Forest Cover Inside and Outside Recorded Forest Area (or Green Wash) in Tripura (in sq km)

Forest Cover Inside the Recorded Forest Area (or Green Wash)				Forest Cover Outside the Recorded Forest Area (or Green Wash)			
VDF	MDF	OF	Total	VDF	MDF	OF	Total
407	3,886	1,140	5,433	240	1,326	723	2,289
7.49%	71.53%	20.98%		10.48%	57.93%	31.59%	

*in case of Tripura, RFA boundaries have been used.

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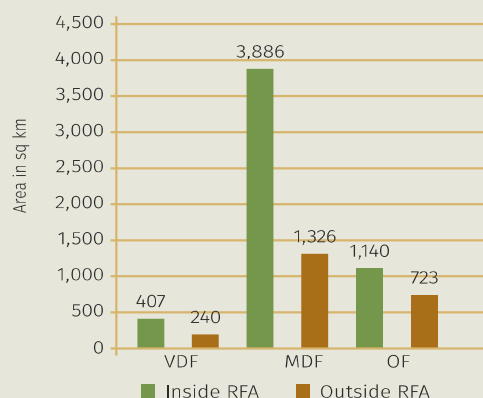
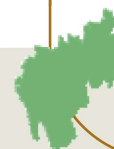


Figure 13.26.2
Forest Cover Inside
and Outside of RFA
in Tripura

Table 13.26.5 Forest Cover Change Matrix for Tripura

(in sq km)

Class	2021 Assessment					Total ISFR 2019
	VDF	MDF	OF	Scrub	NF	
Very Dense Forest	643	1	1	0	9	654
Moderately Dense Forest	4	5,195	14	0	23	5,236
Open Forest	0	8	1,811	3	14	1,836
Scrub	0	0	0	29	0	29
Non Forest	0	8	37	1	2,685	2,731
Total ISFR 2021	647	5,212	1,863	33	2,731	10,486
Net Change	-7	-24	27	4	0	

Table 13.26.6 Altitude-wise Forest Cover in Tripura

(in sq km)

Altitude Zone (m)	Geographical Area	VDF	MDF	OF	Total	Scrub
0-500	10,420	647	5,165	1,846	7,658	30
500-1000	66	0	47	17	64	3
Total	10,486	647	5,212	1,863	7,722	33

(based on SRTM, Digital Elevation Model, 30 m, 2016)

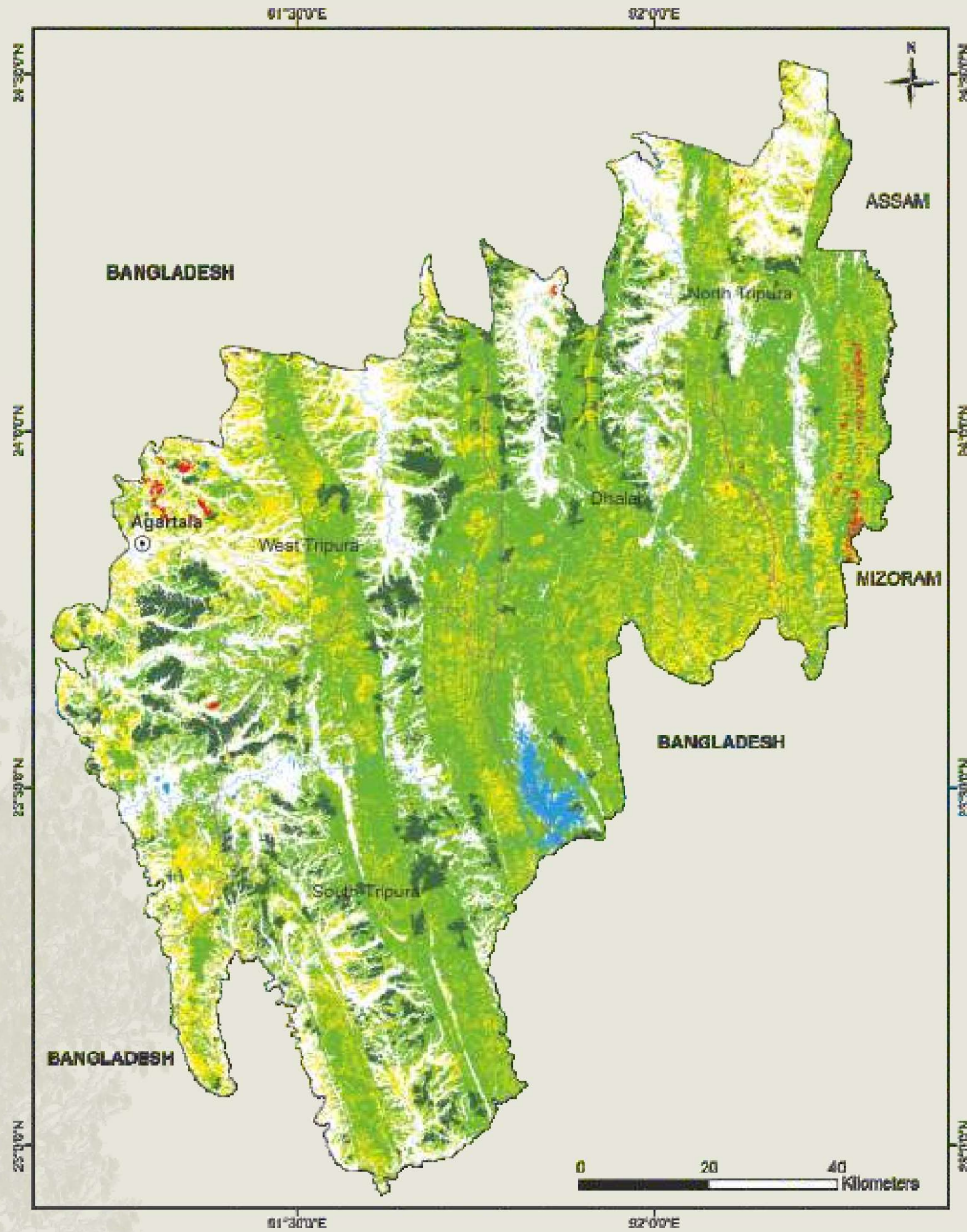
Table 13.26.7 Forest Cover in different slope classes in Tripura

(in sq km)

Slope (in degrees)	Geographical Area	VDF	MDF	OF	Total	Scrub
0-5	6,067	428	2,422	950	3,800	13
5-10	2,630	172	1,593	466	2,231	4
10-15	1,059	35	720	235	990	3
15-20	446	8	300	123	431	4
20-25	179	2	114	56	172	4
25-30	68	1	41	22	64	3
>30	37	1	22	11	34	2
Total	10,486	647	5,212	1,863	7,722	33

(based on SRTM, Digital Elevation Model, 30 m, 2016)

Figure 13.26.3 Forest Cover Map of Tripura



LEGEND

- Very Dense Forest
- Moderately Dense Forest
- Open Forest
- Scrub
- Non-Forest
- Water-bodies
- International Boundary
- State Boundary
- District Boundary
- Capital

13.26.2 Forest Types

The area under different forest types of Tripura as per the Champion & Seth classification (1968), according to the Atlas Forest Types of India 2020 are presented in the following Table.

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Table 13.26.8 Area statistics of the Forest Types found in Tripura

(in sq km)

Sl. No.	Forest Type	Area	% of the total mapped area*
1.	2B/C2 Cachar semi-evergreen forest	2,126.56	27.42
2.	2B/C1/2S1 Pioneer Euphorbiaceous scrub	1.15	0.02
3.	2/2S1 Secondary moist bamboo brakes	590.44	7.61
4.	3C/C1b(ii) East Himalayan lower bhabar sal	196.75	2.54
5.	3C/C3b East Himalayan moist mixed deciduous forest	3,052.68	39.37
Sub Total		5,967.58	76.96
6.	TOF/Plantation	1,786.80	23.04
Total (Forest Cover & Scrub)		7,754.38	100.00

*Forest Types have been assigned to the natural forest formations under forest cover and scrub categories shown in forest cover mapping (ISFR, 2019). The total mapped area, therefore, is sum of forest cover, scrub and grassland forest types (found in non-forest).

13.26.3 Fire Prone Forest Areas

Forest Cover under different classes of forest fire proneness is given in following table.

Table 13.26.9 Forest Fire Prone Classes

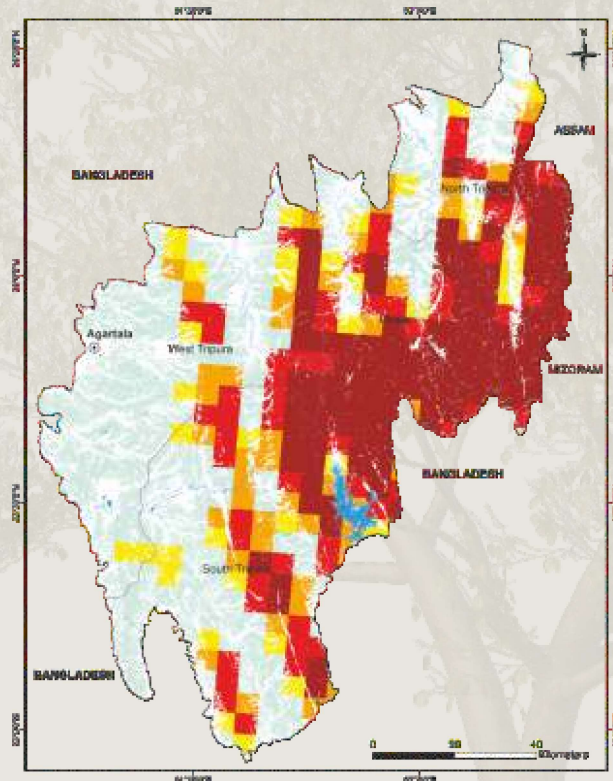
(in sq km)

Sl. No.	Forest Fire Prone Classes	Forest Cover	% of Total Forest Cover
1.	Extremely fire prone	2,491.90	32.27
2.	Very highly fire prone	1,249.76	16.18
3.	Highly fire prone	812.80	10.53
4.	Moderately fire prone	641.61	8.31
5.	Less fire prone	2,525.93	32.71
Total		7,722.00	100.00

Figure 13.26.4 Fire prone forest areas under different fire prone

LEGEND

- Extremely Fire Prone
- Very Highly Fire Prone
- Highly Fire Prone
- Moderately Fire Prone
- Less Fire Prone
- Water-bodies
- International Boundary
- State Boundary
- District Boundary
- Capital



13.26.4 Tree Cover

Tree cover is defined as all tree patches of size less than 1 ha occurring outside the recorded forest area. Tree cover includes trees in all formations including scattered trees. Tree cover in Tripura has been estimated as given in following table.

Table 13.26.10 Tree Cover in Tripura (in sq km)

2019 Assessment	2021 Assessment	Change wrt 2019 Assessment
231	228	-3

13.26.5 Extent of Trees Outside Forest (TOF)

Trees outside Forests (TOF) refer to tree resources found outside the forests as defined in the Government records. Forest Cover outside the recorded forest area is derived using boundaries of RFA or Green Wash. Extent of TOF therefore may be estimated as the sum of extent of forest cover outside the recorded forest areas (RFA) and tree cover as given in following table.

Table 13.26.11 Extent of TOF in Tripura (in sq km)

Forest Cover outside the RFA/GW	Tree Cover	Extent of TOF
2,289	228	2,517

13.26.6 Growing Stock in Tripura

Growing stock in the recorded forest areas (RFA) in Tripura is given in the Table 13.26.12. Diameter class-wise distribution of top 5 species in numbers derived from the forest inventory data is presented in the table 13.26.13.

Table 13.26.12 Growing Stock in Tripura (in m cum)

Sl. No.	Growing Stock (GS)	2019 Assessment	2021 Assessment	Change wrt 2019 Assessment	% of Country's GS
1.	Growing Stock in Recorded Forest Area	19.74	23.13	3.39	0.53
2.	Growing Stock in TOF	6.76	7.46	0.70	0.42

Table 13.26.13 Diameter class distribution of top five tree species inside RFA in Tripura (in '000)

Sl. No.	Species	Dia class (cm)		
		10-30	30-60	>60
1.	<i>Hevea brasiliensis</i>	39,996	2,963	0
2.	<i>Tectona grandis</i>	7,710	1,039	0
3.	<i>Albizia</i> spp.	6,012	1,357	93
4.	<i>Shorea robusta</i>	1,645	348	41
5.	<i>Pterospermum acerifolium</i>	1,500	444	65



13.26.7 Dominant tree species in Trees Outside Forests (TOF)

Top five species in numbers in Trees Outside Forests in Tripura in Rural and Urban areas are given in the Table 13.26.14 and Table 13.26.15 respectively.

Table 13.26.14: Top five tree species in TOF (Rural) in Tripura

Sl. No.	Species	Relative Abundance (%)
1.	<i>Hevea brasiliensis</i>	58.70
2.	<i>Tectona grandis</i>	7.76
3.	<i>Areca catechu</i>	3.95
4.	<i>Schima wallichii</i>	2.62
5.	<i>Syzygium cumini</i>	2.37

Table 13.26.15: Top five tree species in TOF (Urban) in Tripura

Sl. No.	Species	Relative Abundance (%)
1.	<i>Areca catechu</i>	21.73
2.	<i>Hevea brasiliensis</i>	15.96
3.	<i>Mangifera indica</i>	9.30
4.	<i>Areca triandra</i>	8.93
5.	<i>Cocos nucifera</i>	6.79

13.26.8 Carbon Stock in Forest

The total Carbon stock of forest in the State including the TOF patches which are more than 1ha in size is 74.97 million tonnes (274.89 million tonnes of CO₂ equivalent) which is 1.04% of total forest carbon of the country. Pool wise forest carbon in Tripura is given in the following table

Table 13.26.16 Forest Carbon in Tripura in different pools (in '000 tonnes)

Sl. No.	Carbon Pools	Forest Carbon
1.	AGB	24,349
2.	BGB	5,358
3.	Dead wood	477
4.	Litter	1,486
5.	SOC	43,304
Total		74,974

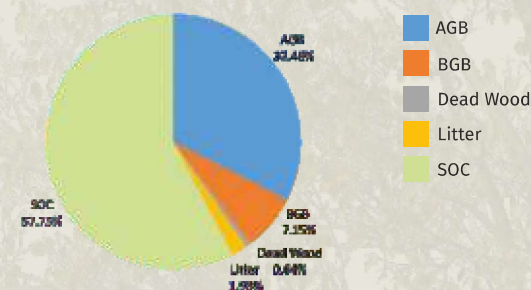


Figure 13.26.5 Forest Carbon in Tripura

13.26.9 Growing Stock of Bamboo

Bamboo bearing area and growing stock inside the recorded forest area (RFA)/ Green Wash which include culms of 1 year age and above are given in the following table.

Table 13.26.17 Growing Stock of Bamboo in Tripura

Growing Stock (GS)		% of Country's GS of Bamboo
Bamboo bearing area inside RFA/Green Wash (in sq km)	4,201	2.81
Total number of culms (in millions)	1,562	2.93
Total equivalent green weight (in '000 tonnes)	12,413	3.09

13.26.10 Major NTFP and Invasive Species

Major NTFP and invasive species as assessed from forest inventory data are presented in the Table 13.26.18 and Table 13.26.19 respectively.

Table 13.26.18 Major NTFP species in Tripura

Sl. No.	Species	Plant Type	Relative Abundance (%)
1.	<i>Thysanolaena maxima</i>	Herbs	89.66
2.	<i>Mucuna pruriens</i>	Climber	10.34

Table 13.26.19 Major invasive species in the State inside the RFA/Green wash in Tripura (in sq km)

Sl. No.	Species	Estimated Extent
1.	<i>Chromolaena odorata</i>	134
2.	<i>Mikania micrantha</i>	56
3.	<i>Imperata cylindrica</i>	11
4.	<i>Saccharum spontanem</i>	5
5.	<i>Lantana camara</i>	2

Major NTFP species are given in terms of relative abundance whereas invasive species are given in terms of their estimated extent.

