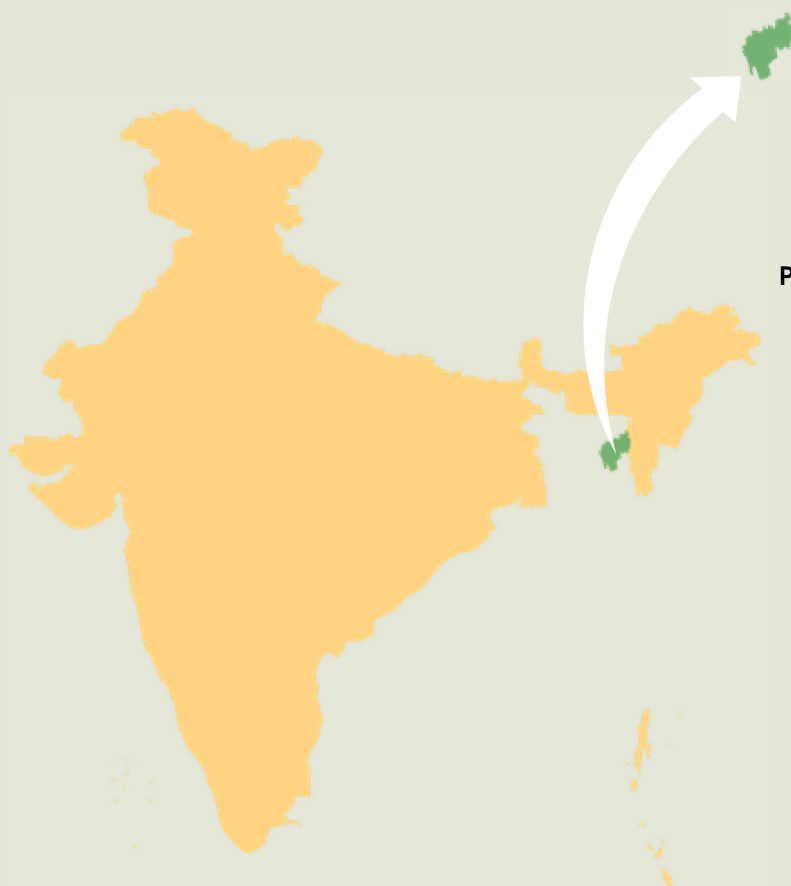


TRIPURA


Geographical Area

10,486 km²
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 km²
Livestock Population

(as per 19th Livestock Census)

1.94 million

No. of Districts

8

No. of Hill Districts

8

No. of Tribal Districts

8

Table 10.26.1 Land Use Pattern

Land Use Types	Area (in '000 ha)	Percentage
Geographical Area	1,049	
Reporting area for land utilization	1,049.17	100.00
Forests	629.43	59.99
Not available for land cultivation	149.09	14.21
Permanent pastures and other grazing lands	0.89	0.08
Land under misc. tree crops and groves	9.65	0.92
Culturable wasteland	2.48	0.25
Fallow land other than current fallows	1.20	0.11
Current fallows	1.02	0.10
Net area sown	255.41	24.34

Source: Land Use Statistics, Ministry of Agriculture and Farmer's Welfare, GOI, (2021-22).

10.26.1 Forest Cover

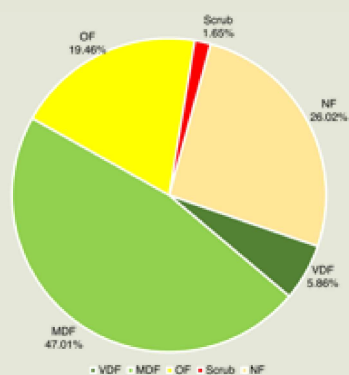


Table 10.26.2 Forest Cover of Tripura

(km ²)		
Class	Area	% of Calculated Area by Sol
VDF	614.43	5.86
MDF	4,929.99	47.01
OF	2,040.35	19.46
Total	7,584.77	72.33
Scrub	173.27	1.65

Figure 10.26.1 Forest Cover of Tripura

Table 10.26.3 District- wise Forest Cover in Tripura

(km ²)								
District	Calculated Area by Sol	2023 Assessment				% of Calculated Area by Sol	Change w.r.t. 2021 Raster based*	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Dhalai ^H	2,298.47	95.68	1,302.69	421.78	1,820.15	79.19	-44.58	60.18
Gomati ^H	1,650.23	123.70	861.58	251.56	1,236.84	74.95	6.86	12.05
Khowai ^H	1,055.66	93.62	453.48	192.59	739.69	70.07	-23.16	10.88
North Tripura ^H	1,349.70	11.70	663.97	368.65	1,044.32	77.37	-18.88	56.34
Sepahijala ^H	1,053.06	101.24	368.57	185.44	655.25	62.22	-7.35	1.56
South Tripura ^H	1,468.69	108.17	671.29	294.31	1,073.77	73.11	11.60	6.31
Unakoti ^H	685.53	34.29	304.62	92.31	431.22	62.90	-13.52	13.50
West Tripura ^H	924.66	46.03	303.79	233.71	583.53	63.11	-6.28	12.45
Grand Total	10,486.00	614.43	4,929.99	2,040.35	7,584.77	72.33	-95.31	173.27

*Area figure calculated without normalization factor.



Table 10.26.4 Division- wise Forest Cover in Tripura

Division	Digitized Division Boundary Area*	2023 Assessment				% of Digitized Division Boundary Area*	Change w.r.t. 2021 Raster based*	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Ambassa	1,380.74	67.26	800.11	202.86	1,070.23	77.51	-30.29	38.12
Bagafa	1,200.70	81.43	603.97	224.85	910.25	75.81	8.79	11.15
Gumti	955.77	66.48	564.03	138.13	768.64	80.42	-6.30	4.20
Kailashahar	878.56	31.74	272.85	171.64	476.23	54.21	-7.27	13.47
Kanchanpur	1,186.91	15.87	690.00	277.27	983.14	82.83	-26.30	55.24
Manu	859.38	27.95	493.60	210.39	731.94	85.17	-9.98	20.13
Sadar	1,476.72	114.70	477.46	274.93	867.09	58.72	-10.00	12.96
Sepahijala WL Sanctuary	26.52	14.73	1.72	0.41	16.86	63.57	-0.04	0.00
Teliamura	1,397.61	109.36	570.84	278.82	959.02	68.62	-25.41	12.68
Trishna WLS	489.67	35.43	171.14	138.32	344.89	70.43	1.51	1.83
Udaipur	605.10	47.69	265.46	90.69	403.84	66.74	11.64	1.09
Area which does not fall in any Division	96.75	1.79	18.81	32.04	52.64	54.41	-1.66	2.40
Grand Total	10,554.43	614.43	4,929.99	2,040.35	7,584.77	71.86	-95.31	173.27

#As per the division boundary shapefile provided by State Forest Department.

*Area figure calculated without normalization factor.

Table 10.26.5 Forest Cover in Municipal Areas of Tripura

Sl. No.	Name of Urban Local Body	Area as per Digitized Boundary*	2023 Assessment				% of Total Forest Cover w.r.t. Area of Digitized Boundary	Scrub
			Very Dense Forest	Mod. Dense Forest	Open Forest	Total Forest Cover		
1	Agartala	81.14	0.00	3.45	17.58	21.03	25.92	0.07
Grand Total		81.14	0.00	3.45	17.58	21.03	25.92	0.07

*Shapefile of digitized boundary as provided by Agartala Municipal Corporation.

10.26.2 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 10.26.6 Forest Cover Inside and Outside Recorded Forest Area (or Green Wash) in Tripura

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
393.77	3,719.84	1,242.58	5,356.19	220.66	1,210.15	797.77	2,228.58
7.35%	69.45%	23.20%		9.90%	54.30%	35.80%	

(km²)

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

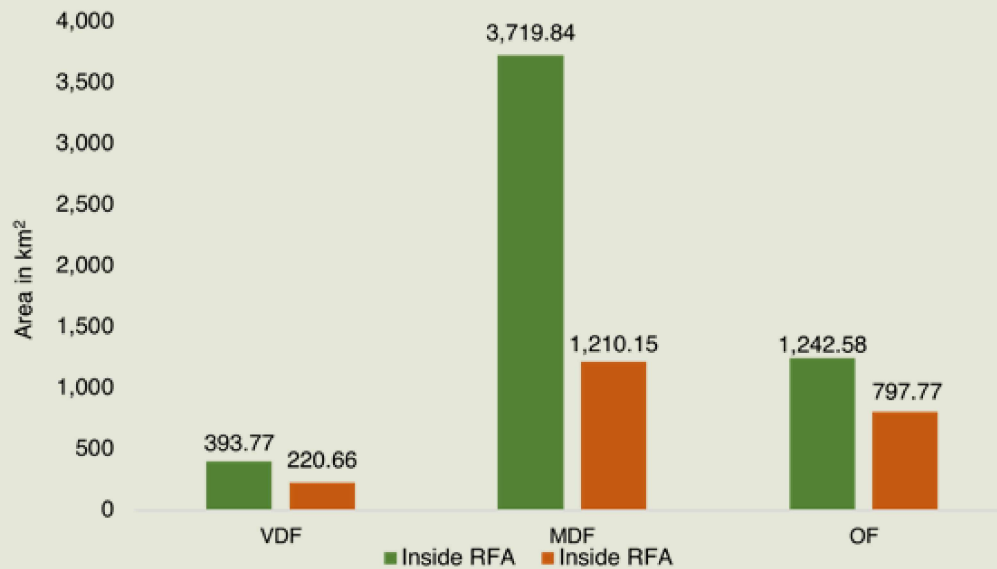


Figure 10.26.2 Forest Cover Inside and Outside of RFA in Tripura

Table 10.26.7 Forest Cover Change Matrix Inside RFA/GW for Tripura between 2021 Raster based and 2023 Assessments

Class	2023 Assessment inside RFA/GW					Total ISFR 2021 inside RFA / GW Raster based*
	VDF	MDF	OF	Scrub	NF	
VDF	392.28	2.13	1.24	6.43	6.23	408.31
MDF	1.49	3,620.14	114.28	69.61	79.63	3,885.15
OF	0.00	97.24	1,005.59	47.21	29.59	1,179.63
Scrub	0.00	0.00	16.13	5.60	0.00	21.73
NF	0.00	0.33	105.34	3.29	351.22	460.18
Total ISFR 2023 inside RFA /GW	393.77	3,719.84	1,242.58	132.14	466.67	5,955.00
Net Change	-14.54	-165.31	62.95	110.41	6.49	

*Area figure calculated without normalization factor.



Table 10.26.8 Forest Cover Change Matrix Outside RFA/GW for Tripura between 2021 Raster based and 2023 Assessments

Class	2023 Assessment outside RFA/GW					(km ²)
	VDF	MDF	OF	Scrub	NF	Total ISFR 2021 outside RFA / GW Raster based*
VDF	220.66	0.66	0.18	1.03	2.80	225.33
MDF	0.00	1,122.90	91.05	9.35	35.02	1,258.32
OF	0.00	85.60	612.23	6.24	19.27	723.34
Scrub	0.00	0.00	1.07	23.77	0.36	25.20
NF	0.00	0.99	93.24	0.74	2,203.84	2,298.81
Total ISFR 2023 outside RFA/GW	220.66	1,210.15	797.77	41.13	2,261.29	4,531.00
Net Change	-4.67	-48.17	74.43	15.93	-37.52	

*Area figure calculated without normalization factor.

Table 10.26.9 Altitude-wise Forest Cover in Tripura

Altitude Zone (m)	Calculated Area by Sol						(km ²)
		VDF	MDF	OF	Total	Scrub	
0-500	10,424.58	614.43	4,892.50	2,022.33	7,529.26	169.90	
500-1000	61.42	0.00	37.49	18.02	55.51	3.37	
Total	10,486.00	614.43	4,929.99	2,040.35	7,584.77	173.27	

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

Table 10.26.10 Forest Cover in Different Slope Classes in Tripura

Slope (in degrees)	Calculated Area by Sol						(km ²)
		VDF	MDF	OF	Total	Scrub	
0-5	6,070.75	402.22	2,292.70	1,049.20	3,744.12	69.85	
5-10	2,634.23	165.98	1,519.22	517.95	2,203.15	48.67	
10-15	1,056.10	34.66	677.56	250.91	963.13	28.04	
15-20	443.19	7.79	278.11	126.67	412.57	15.02	
20-25	177.89	2.24	104.78	58.60	165.62	6.98	
25-30	67.40	0.74	37.44	24.24	62.42	3.09	
>30	36.44	0.80	20.18	12.78	33.76	1.62	
Total	10,486.00	614.43	4,929.99	2,040.35	7,584.77	173.27	

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

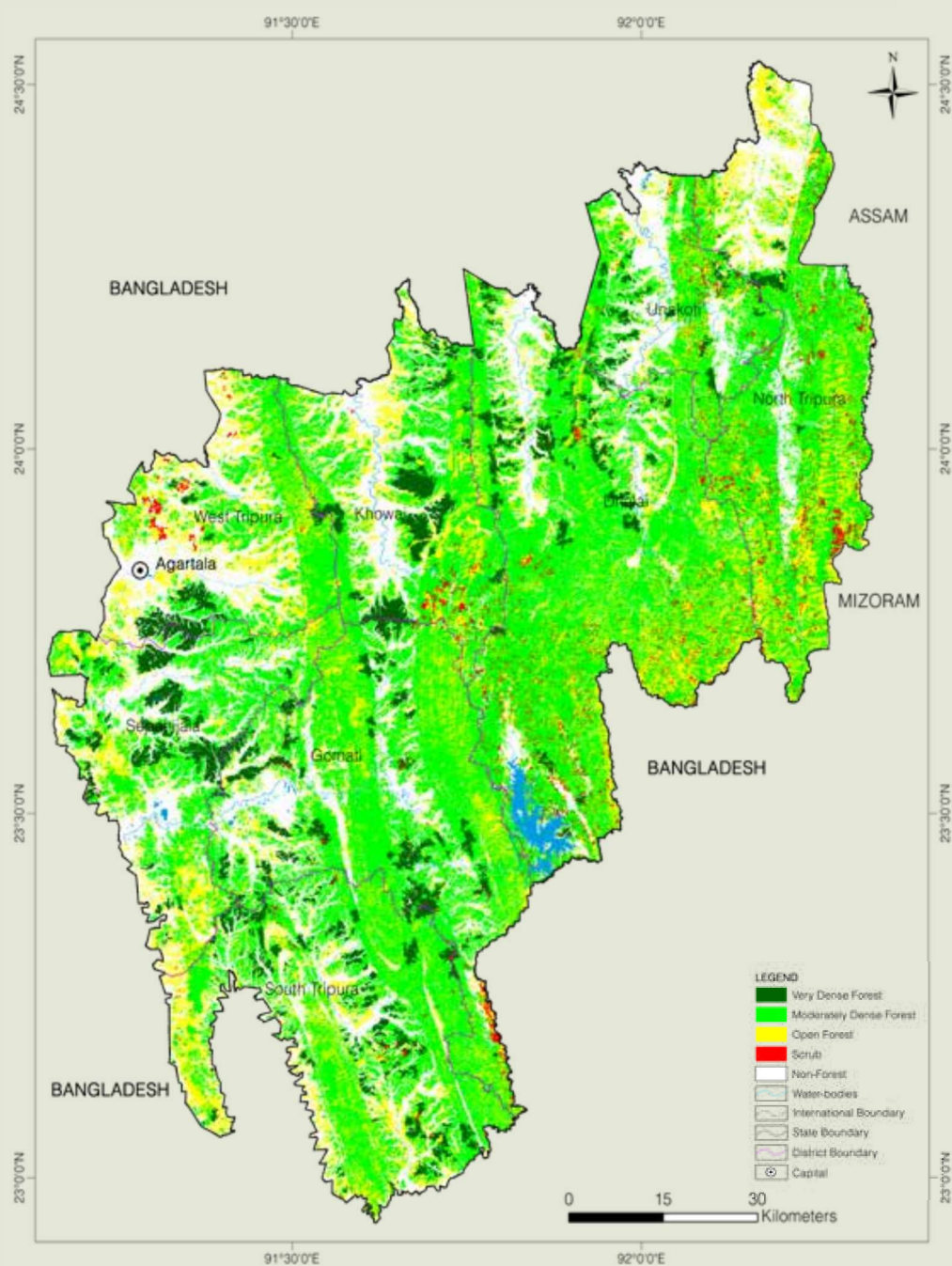


Figure 10.26.3 Forest Cover Map of Tripura



10.26.3 Forest Types

The area under different Forest Types in Tripura (as per the Champion & Seth Forest Classification, 1968) based on the Forest Cover Map (FCM), ISFR-2023, is presented in the following table.

Table 10.26.11 Area Statistics of the Forest Types Found in Tripura

(km ²)			
Sl. No.	Forest Type	Area	% of the total mapped area*
1	2B/C2 Cachar semi-evergreen forest	1.09	0.01
2	2B/C1/2S1 Pioneer Euphorbiaceous scrub	2,141.12	27.60
3	2/2S1 Secondary moist bamboo brakes	583.60	7.52
4	3C/C1b(ii) East Himalayan lower bhabar sal	195.35	2.52
5	3C/C3b East Himalayan moist mixed deciduous forest	3,020.86	38.94
Sub Total		5,942.02	76.59
6	TOF/ Plantation	1,816.02	23.41
Total (Forest Cover & Scrub)		7,758.04	100.00

*Forest Types have been assigned to the natural forest formations under forest cover and scrub categories shown in the forest cover mapping (ISFR, 2023). The total mapped area, therefore, is sum of forest cover and scrub.

10.26.4 Forest Fire

District-wise number of forest fire detected by FSI using SNPP-VIIRS sensors (This includes large, continuous and repeated forest fires) during the fire season 2022-23 & 2023-24.

Table 10.26.12 District-wise Number of Forest Fire Detected

Sl. No.	District	SNPP-VIIRS Detection during 2022-23	SNPP-VIIRS Detection during 2023-24
1	Dhalai	1,935	1,070
2	Gomati	665	210
3	Khowai	306	137
4	North Tripura	788	436
5	Sepahijala	60	14
6	South Tripura	248	100
7	Unakoti	261	99
8	West Tripura	69	23
Total		4,332	2,089

10.26.5 Fire Prone Forest Areas

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

Table 10.26.13 Forest Fire Prone Classes

(km ²)			
Sl. No.	Forest Fire Prone Classes	Forest Cover*	% of Total Forest Cover
1	Extremely fire prone	688.72	8.88
2	Very highly fire prone	1,791.02	23.08
3	Highly fire prone	1,104.48	14.24
4	Moderately fire prone	975.94	12.58
5	Less fire prone	3,197.88	41.22
Total		7,758.04	100.00

*Forest Cover including Scrub.

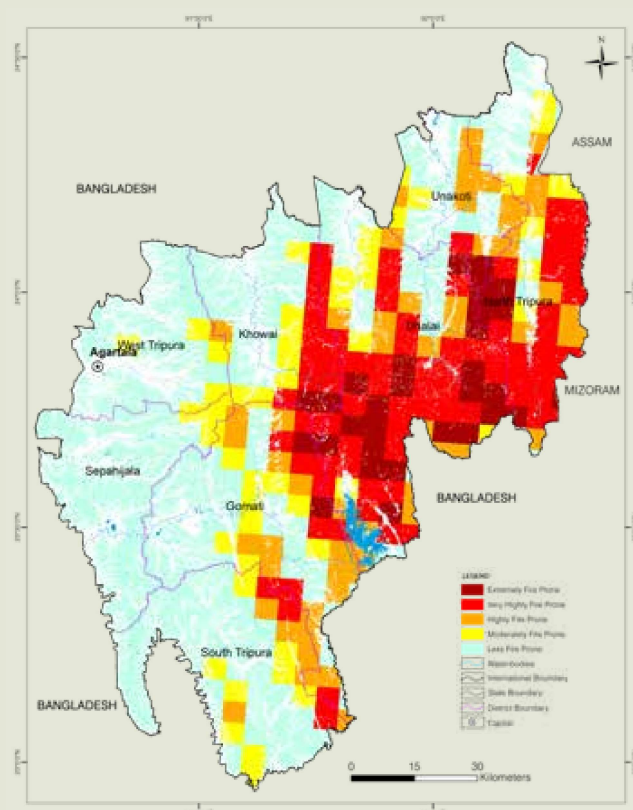


Figure 10.26.4 Fire Prone Forest Areas under Different Fire Prone Classes

10.26.6 Results Derived from NFI for Tripura

Table 10.26.14 Number of Trees and their Volume for Top 5 Species in RFA

Sl. No.	Species	No. of Trees (in '000)	Volume (M m ³)
1	<i>Hevea brasiliensis</i>	46,562	6.66
2	<i>Tectona grandis</i>	8,814	2.56
3	<i>Schima wallichii</i>	4,322	1.49
4	<i>Albizia species</i>	3,986	1.55
5	<i>Macaranga species</i>	3,808	0.38



Table 10.26.15 Number of Trees and their Volume for Top 5 Species in Rural Area

Sl. No.	Species	No. of Trees (in '000)	Volume (M m ³)
1	<i>Hevea brasiliensis</i>	37,112	3.610
2	<i>Tectona grandis</i>	3,760	0.804
3	<i>Areca catechu</i>	2,491	0.041
4	<i>Schima wallichii</i>	1,266	0.314
5	<i>Syzygium cumini</i>	1,087	0.287

Table 10.26.16 Number of Trees and their Volume for Top 5 Species in Urban Area

Sl. No.	Species	No. of Trees (in '000)	Volume (M m ³)
1	<i>Areca catechu</i>	972	0.018
2	<i>Hevea brasiliensis</i>	495	0.046
3	<i>Mangifera indica</i>	348	0.084
4	<i>Artocarpus heterophyllus</i>	206	0.041
5	<i>Cocos nucifera</i>	182	0.046

Table 10.26.17 Major NTFP Species in Tripura

Sl. No.	Species	Habit	No. of Plants (in '000)
1	<i>Shorea robusta</i>	Tree	4,49,598
2	<i>Hevea brasiliensis</i>	Tree	46,562
3	<i>Terminalia bellirica</i>	Tree	32,411
4	<i>Anacardium occidentale</i>	Tree	17,677
5	<i>Areca catechu</i>	Tree	2,207
6	<i>Mucuna pruriens</i>	Climbers	6,88,206
7	<i>Thysanolaena latifolia</i> / <i>Thysanolaena maxima</i>	Herbs	1,17,40,130
8	<i>Schumannianthus benthamianus</i> / <i>Schumannianthus dichotomus</i>	Herbs	3,68,318

Table 10.26.18 Major Invasive Species in the State Inside the RFA in Tripura

Sl. No.	Species	Estimated Extent (km ²)
1	<i>Chromolaena odorata</i>	352.47
2	<i>Mikania micrantha</i>	107.32
3	<i>Ageratum conyzoides</i>	39.42
4	<i>Lantana camara</i>	26.18
5	<i>Triumfetta rhomboidea</i>	22.73

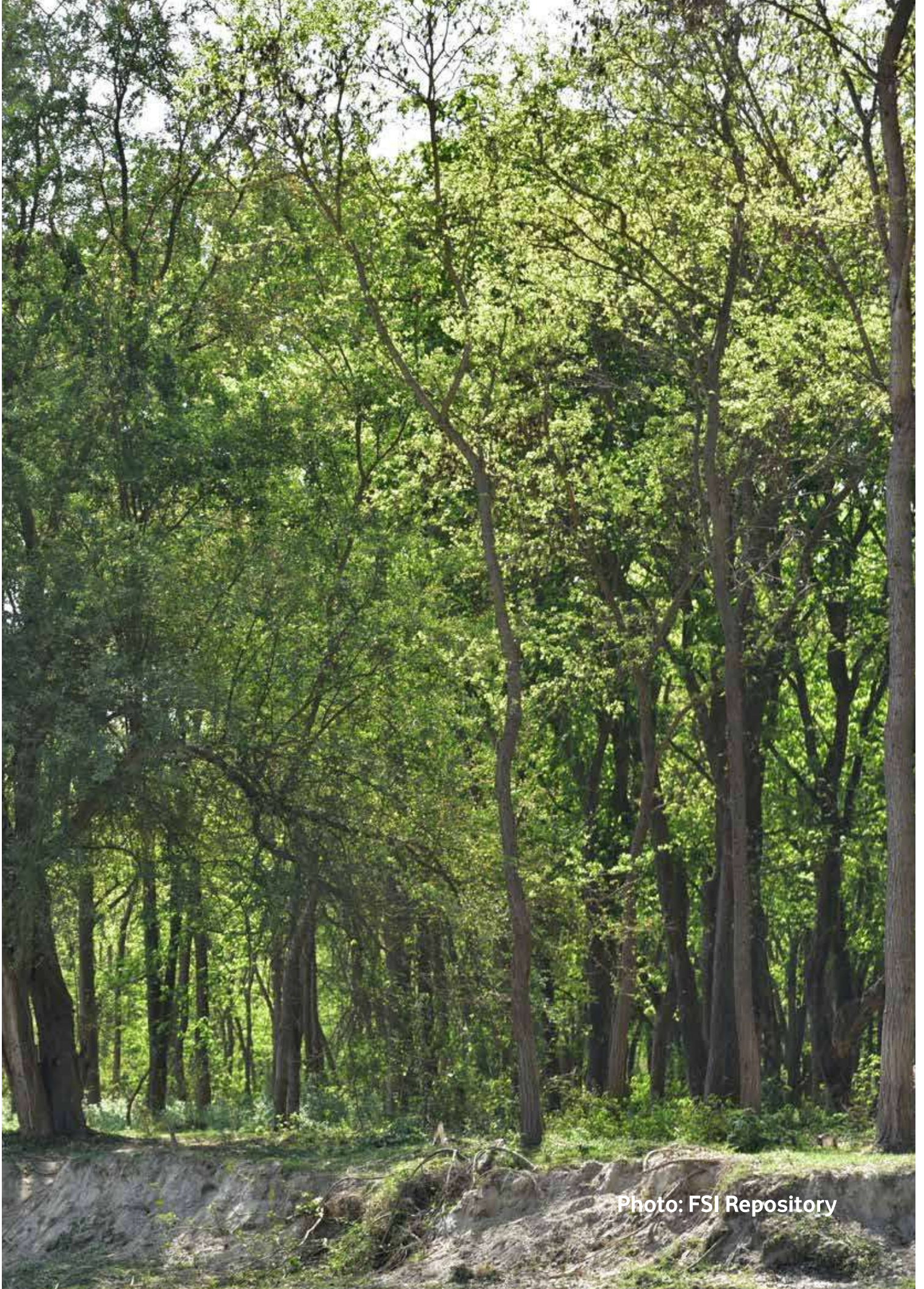


Photo: FSI Repository