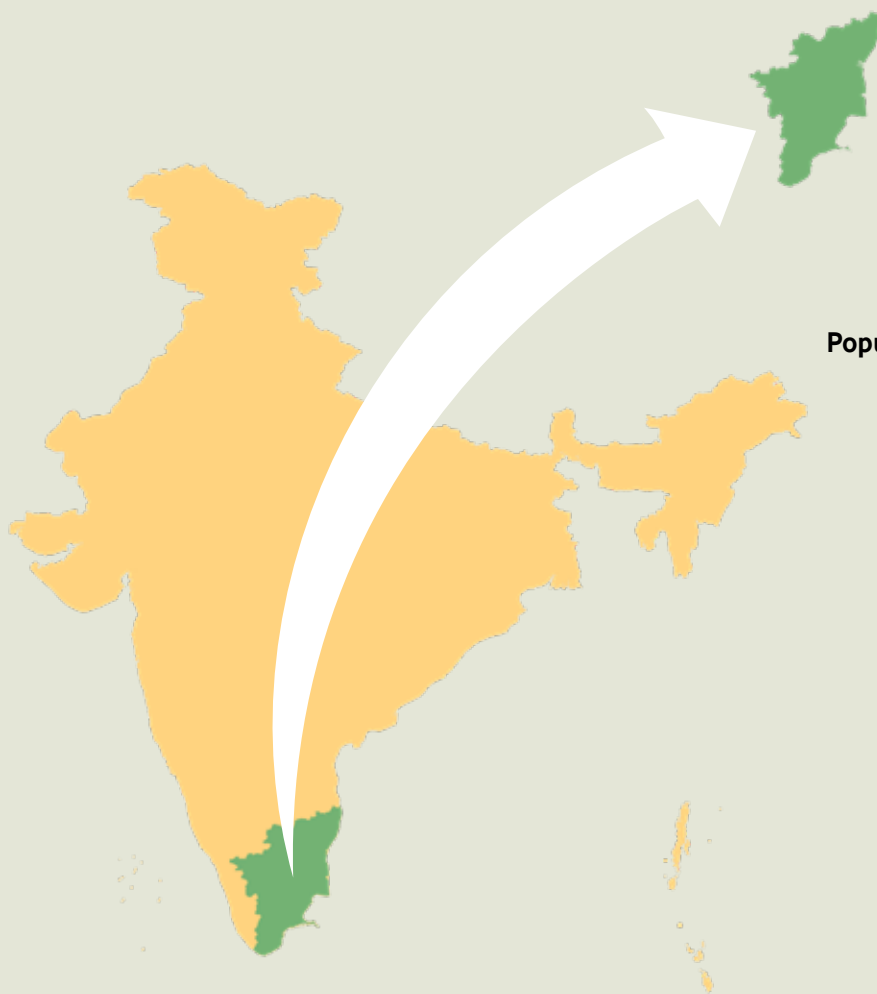


TAMIL NADU



Geographical Area
1,30,060 km²

Geographical Coordinates
Latitude 08°05' N to 13°35' N
Longitude 76°15' E to 80°20' E

Population (as per Census 2011)
72.15 million
Urban 34.92 million (48.40 %)
Rural 37.23 million (51.60 %)
Tribal 0.79 million (1.10 %)

Average Population Density
555 per km²

Livestock Population
(as per 19th Livestock Census)
22.72 million

No. of Districts
38

No. of Hill Districts
6

No. of Tribal Districts
6

Table 10.24.1 Land Use Pattern

| Land Use Types | Area (in '000 ha) | Percentage |
|--|-------------------|------------|
| Geographical Area | 13,006 | |
| Reporting area for land utilization | 13,033.12 | 100.00 |
| Forests | 2,156.57 | 16.54 |
| Not available for land cultivation | 2,663.42 | 20.44 |
| Permanent pastures and other grazing lands | 107.64 | 0.83 |
| Land under misc. tree crops and groves | 186.07 | 1.43 |
| Culturable wasteland | 346.37 | 2.65 |
| Fallow land other than current fallows | 1,863.66 | 14.30 |
| Current fallows | 800.45 | 6.14 |
| Net area sown | 4,908.94 | 37.67 |

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

10.24.1 Forest Cover

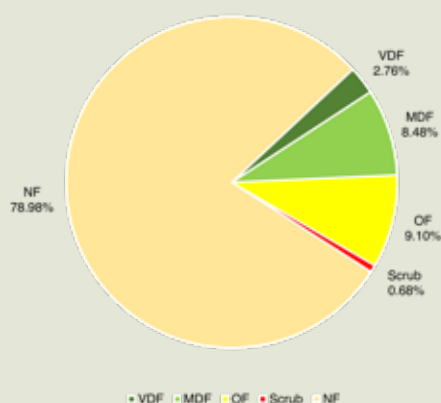


Figure 10.24.1 Forest Cover of Tamil Nadu

Table 10.24.2 Forest Cover of Tamil Nadu

| | | | (km ²) |
|--------------|------------------|-----------------------------|--------------------|
| Class | Area | % of Calculated Area by Sol | |
| VDF | 3,586.19 | 2.76 | |
| MDF | 11,027.03 | 8.48 | |
| OF | 11,837.00 | 9.10 | |
| Total | 26,450.22 | 20.34 | |
| Scrub | 878.29 | 0.68 | |

Table 10.24.3 District- wise Forest Cover in Tamil Nadu

| | | | | | | | | | (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 | | | | |
| Ariyalur | 1,940 | 0.01 | 41.53 | 350.78 | 392.32 | 20.22 | -16.83 | 7.21 | |
| Chengalpattu | 2,831 | 0.00 | 61.64 | 189.10 | 250.74 | 8.86 | -5.87 | 25.63 | |
| Chennai | 175 | 0.00 | 7.82 | 13.30 | 21.12 | 12.07 | -2.04 | 1.98 | |
| Coimbatore ^H | 4,732 | 354.75 | 669.13 | 929.30 | 1,953.18 | 41.28 | -7.37 | 7.91 | |
| Cuddalore | 3,703 | 0.00 | 45.54 | 339.94 | 385.48 | 10.41 | -6.86 | 16.26 | |
| Dharmapuri | 4,497 | 267.82 | 840.94 | 607.53 | 1,716.29 | 38.17 | -2.39 | 15.81 | |
| Dindigul | 6,036 | 251.84 | 786.81 | 849.53 | 1,888.18 | 31.28 | 4.74 | 33.81 | |
| Erode | 5,760 | 399.31 | 1,137.15 | 792.00 | 2,328.46 | 40.42 | 17.68 | 36.59 | |
| Kallakurichi | 3,256 | 78.36 | 236.98 | 261.40 | 576.74 | 17.71 | -11.64 | 40.49 | |
| Kancheepuram | 1,652 | 0.00 | 10.47 | 61.40 | 71.87 | 4.35 | -1.82 | 13.19 | |
| Kanniyakumari ^H | 1,684 | 130.50 | 571.97 | 310.07 | 1,012.54 | 60.13 | 10.70 | 0.58 | |
| Karur | 2,904 | 1.35 | 27.89 | 76.30 | 105.54 | 3.63 | 6.24 | 9.96 | |
| Krishnagiri | 5,129 | 91.67 | 824.11 | 699.99 | 1,615.77 | 31.50 | 9.80 | 35.48 | |
| Madurai ^H | 3,710 | 39.57 | 235.35 | 285.95 | 560.87 | 15.12 | 7.33 | 39.29 | |
| Mayiladuthurai | 1,178 | 0.00 | 5.40 | 27.23 | 32.63 | 2.77 | -0.45 | 0.00 | |
| Nagapattinam | 1,391 | 0.03 | 17.28 | 81.26 | 98.57 | 7.09 | -27.35 | 0.02 | |
| Namakkal | 3,420 | 84.20 | 285.29 | 220.75 | 590.24 | 17.26 | 3.98 | 26.49 | |
| Perambalur | 1,756 | 9.33 | 66.38 | 67.30 | 143.01 | 8.14 | -1.73 | 17.41 | |
| Pudukkottai | 4,644 | 0.62 | 87.37 | 267.17 | 355.16 | 7.65 | -10.35 | 17.68 | |
| Ramanathapuram | 4,104 | 0.43 | 23.58 | 218.33 | 242.34 | 5.90 | -10.28 | 9.71 | |
| Ranipet | 1,849 | 0.00 | 14.31 | 82.34 | 96.65 | 5.23 | -7.15 | 16.54 | |
| Salem | 5,237 | 201.37 | 764.10 | 525.05 | 1,490.52 | 28.46 | 3.82 | 36.59 | |
| Sivaganga | 4,233 | 0.00 | 36.95 | 276.17 | 313.12 | 7.40 | -9.79 | 20.81 | |
| Tenkasi ^H | 2,833 | 115.00 | 215.92 | 153.15 | 484.07 | 17.09 | 3.99 | 9.16 | |
| Thanjavur | 3,411 | 0.07 | 243.02 | 85.70 | 328.79 | 9.64 | -20.14 | 2.84 | |
| The Nilgiris ^H | 2,565 | 447.59 | 622.92 | 636.38 | 1,706.89 | 66.55 | -1.61 | 9.11 | |
| Theni | 2,868 | 176.82 | 478.16 | 562.13 | 1,217.11 | 42.44 | 33.09 | 32.33 | |
| Thiruvarur | 2,274 | 0.00 | 38.83 | 32.89 | 71.72 | 3.15 | 0.55 | 0.00 | |
| Thoothukudi | 4,745 | 0.02 | 23.49 | 237.74 | 261.25 | 5.51 | 12.26 | 82.31 | |



Table 10.24.3 District- wise Forest Cover in Tamil Nadu

| District | Calculated Area by Sol | 2023 Assessment | | | | % of Cal- culated Area by Sol | Change w.r.t. 2021 Raster based* | Scrub |
|--------------------------|------------------------|-------------------|-------------------|------------------|------------------|----------------------------------|----------------------------------|---------------|
| | | Very Dense Forest | Mod. Dense Forest | Open Forest | Total | | | |
| Tiruchchirapalli | 4,509 | 54.40 | 242.75 | 196.88 | 494.03 | 10.96 | 2.58 | 50.87 |
| Tirunelveli ^h | 3,860 | 342.51 | 352.95 | 153.88 | 849.34 | 22.00 | 1.52 | 20.63 |
| Tirupathur | 1,964 | 137.54 | 504.64 | 256.98 | 899.16 | 45.78 | 5.33 | 26.19 |
| Tiruppur | 5,187 | 48.29 | 234.52 | 566.32 | 849.13 | 16.37 | -0.56 | 8.12 |
| Tiruvallur | 3,394 | 11.85 | 45.28 | 222.90 | 280.03 | 8.25 | -17.50 | 50.11 |
| Tiruvannamalai | 6,188 | 235.96 | 601.24 | 481.25 | 1,318.45 | 21.31 | -4.99 | 73.45 |
| Vellore | 2,262 | 63.52 | 434.51 | 347.06 | 845.09 | 37.36 | -8.54 | 39.33 |
| Viluppuram | 3,938 | 0.00 | 59.05 | 191.83 | 250.88 | 6.37 | -12.57 | 8.07 |
| Virudhunagar | 4,241 | 41.46 | 131.76 | 179.72 | 352.94 | 8.32 | 3.26 | 36.33 |
| Grand Total | 1,30,060 | 3,586.19 | 11,027.03 | 11,837.00 | 26,450.22 | 20.34 | -60.96 | 878.29 |

*Area figure calculated without normalization factor.

Table 10.24.4 Division-wise Forest Cover in Tamil Nadu

| 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 | | | |
| Ariyalur | 1,947.91 | 0.01 | 41.31 | 346.61 | 387.93 | 19.92 | -16.76 | 7.15 |
| Attur | 2,103.73 | 109.69 | 382.89 | 204.31 | 696.89 | 33.13 | -0.79 | 7.70 |
| Chengalpattu | 4,483.21 | 0.00 | 72.44 | 244.67 | 317.11 | 7.07 | -8.69 | 39.67 |
| Coimbatore | 2,919.91 | 124.47 | 378.36 | 378.41 | 881.24 | 30.18 | 0.50 | 6.80 |
| Cuddalore | 3,712.62 | 0.00 | 44.84 | 333.88 | 378.72 | 10.20 | -6.87 | 13.36 |
| Dharmapuri | 2,639.57 | 60.62 | 455.18 | 435.49 | 951.29 | 36.04 | -3.29 | 5.66 |
| Dindigul | 5,206.65 | 67.88 | 508.66 | 700.67 | 1,277.21 | 24.53 | 2.98 | 27.31 |
| Erode | 2,852.50 | 238.19 | 443.08 | 203.88 | 885.15 | 31.03 | 12.88 | 3.42 |
| Gudalur | 483.05 | 75.67 | 113.66 | 183.95 | 373.28 | 77.28 | -0.26 | 2.27 |
| Harur | 1,835.02 | 210.16 | 383.55 | 168.97 | 762.68 | 41.56 | 0.84 | 9.23 |
| Hassanur | 529.60 | 62.96 | 228.26 | 207.74 | 498.96 | 94.21 | -0.36 | 9.05 |
| Hosur | 5,173.89 | 93.40 | 825.27 | 699.21 | 1,617.88 | 31.27 | 10.06 | 35.50 |
| Kallakurichi | 1,838.44 | 75.02 | 228.09 | 129.28 | 432.39 | 23.52 | -6.85 | 25.18 |
| Kanyakumari | 1,604.15 | 79.29 | 541.83 | 310.41 | 931.53 | 58.07 | 10.40 | 0.59 |
| Karaikkal | 159.85 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 |
| Karur | 2,909.07 | 1.83 | 30.78 | 79.93 | 112.54 | 3.87 | 6.24 | 11.03 |
| Kodaikanal | 941.45 | 186.61 | 300.38 | 180.31 | 667.30 | 70.88 | 2.32 | 10.36 |
| Madurai | 2,660.56 | 14.33 | 126.23 | 192.80 | 333.36 | 12.53 | 4.75 | 21.66 |
| Megamalai | 546.28 | 16.88 | 96.63 | 106.75 | 220.26 | 40.32 | 2.75 | 5.22 |
| Namakkal | 3,430.53 | 83.61 | 287.28 | 225.62 | 596.51 | 17.39 | 4.05 | 26.33 |
| Nilgiris North | 1,073.51 | 102.19 | 266.72 | 339.92 | 708.83 | 66.03 | -1.75 | 6.24 |
| Nilgiris South | 578.17 | 139.54 | 101.41 | 45.77 | 286.72 | 49.59 | 0.64 | 0.48 |
| Perambalur | 1,751.10 | 11.02 | 60.82 | 58.88 | 130.72 | 7.47 | -1.77 | 18.27 |

Table 10.24.4 Division-wise Forest Cover in Tamil Nadu

| 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 | | | |
| Puducherry | 294.07 | 0.00 | 0.02 | 0.41 | 0.43 | 0.15 | -0.05 | 0.00 |
| Pudukkottai | 4,688.87 | 0.43 | 94.67 | 268.79 | 363.89 | 7.76 | -12.21 | 17.67 |
| Ramanathapuram | 4,110.64 | 0.47 | 22.73 | 213.63 | 236.83 | 5.76 | -9.15 | 9.30 |
| Salem | 3,138.34 | 89.75 | 379.25 | 319.85 | 788.85 | 25.14 | 4.61 | 28.23 |
| Sathyamangalam | 929.47 | 95.70 | 423.33 | 327.19 | 846.22 | 91.04 | -0.09 | 16.67 |
| Sivagangai | 4,236.89 | 0.00 | 36.63 | 284.35 | 320.98 | 7.58 | -9.56 | 20.94 |
| Thanjavur | 3,685.04 | 0.07 | 245.90 | 72.62 | 318.59 | 8.65 | -19.64 | 3.10 |
| Theni | 2,312.87 | 161.92 | 384.09 | 465.52 | 1,011.53 | 43.73 | 30.08 | 24.05 |
| Thiruvallur | 3,419.47 | 10.88 | 42.83 | 221.49 | 275.20 | 8.05 | -19.05 | 46.99 |
| Thiruvarur | 2,009.97 | 0.00 | 36.45 | 33.00 | 69.45 | 3.46 | 0.54 | 0.00 |
| Thoothukudi | 4,627.27 | 0.02 | 22.80 | 237.14 | 259.96 | 5.62 | 11.99 | 85.80 |
| Tiruchirappalli | 4,518.65 | 51.50 | 240.94 | 203.16 | 495.60 | 10.97 | 2.58 | 50.46 |
| Tirunelveli | 5,435.84 | 112.09 | 223.46 | 222.33 | 557.88 | 10.26 | 9.05 | 21.32 |
| Tirupattur | 2,028.74 | 128.12 | 471.51 | 231.19 | 830.82 | 40.95 | -1.87 | 21.87 |
| Tiruvannamalai (N) | 3,687.62 | 164.36 | 275.28 | 194.87 | 634.51 | 17.21 | -2.24 | 28.48 |
| Tiruvannamalai (S) | 2,526.22 | 69.65 | 317.97 | 284.62 | 672.24 | 26.61 | -2.81 | 42.85 |
| Vellore | 4,073.12 | 73.98 | 478.33 | 449.11 | 1,001.42 | 24.59 | -7.88 | 56.81 |
| Viluppuram | 5,408.48 | 0.00 | 68.86 | 327.69 | 396.55 | 7.33 | -16.95 | 24.09 |
| WL ATR Pollachi | 1,862.69 | 232.36 | 324.40 | 561.98 | 1,118.74 | 60.06 | -7.95 | 0.84 |
| WL ATR Tiruppur | 5,206.96 | 48.34 | 234.34 | 568.97 | 851.65 | 16.36 | -0.78 | 8.07 |
| WL, Chennai | 179.16 | 0.00 | 6.24 | 6.28 | 12.52 | 6.99 | -0.90 | 0.00 |
| WL, KMTR | 1,458.66 | 391.85 | 350.98 | 92.15 | 834.98 | 57.24 | -1.36 | 10.71 |
| WL Marine NP | 1,564.93 | 0.00 | 0.72 | 4.66 | 5.38 | 0.34 | -1.43 | 0.77 |
| WL MTR | 410.62 | 131.43 | 143.75 | 66.35 | 341.53 | 83.17 | -0.06 | 0.10 |
| WL Nagapattinam | 2,591.83 | 0.03 | 23.14 | 101.64 | 124.81 | 4.82 | -27.86 | 0.03 |
| WL Srivilliputhur | 5,218.73 | 61.56 | 222.24 | 252.86 | 536.66 | 10.28 | 5.91 | 56.61 |
| WL STR | 1,399.73 | 1.68 | 12.86 | 44.75 | 59.29 | 4.24 | 5.10 | 9.24 |
| Area which does not fall in any Division | 319.02 | 6.63 | 25.64 | 2.93 | 35.20 | 11.03 | 0.00 | 0.81 |
| Grand Total | 1,32,724.67 | 3,586.19 | 11,027.03 | 11,837.00 | 26,450.22 | 19.93 | -60.96 | 878.29 |

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

*Area figure calculated without normalization factor.



10.24.2 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 10.24.5 Forest Cover Inside and Outside Recorded Forest Area (or Green Wash) in Tamil Nadu

| 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 |
| 3,344.13 | 8,681.60 | 5,708.57 | 17,734.30 | 242.06 | 2,345.43 | 6,128.43 | 8,715.92 |
| 18.86% | 48.95% | 32.19% | | 2.78% | 26.91% | 70.31% | |

**In case of Tamil Nadu, RFA boundaries have been used.*

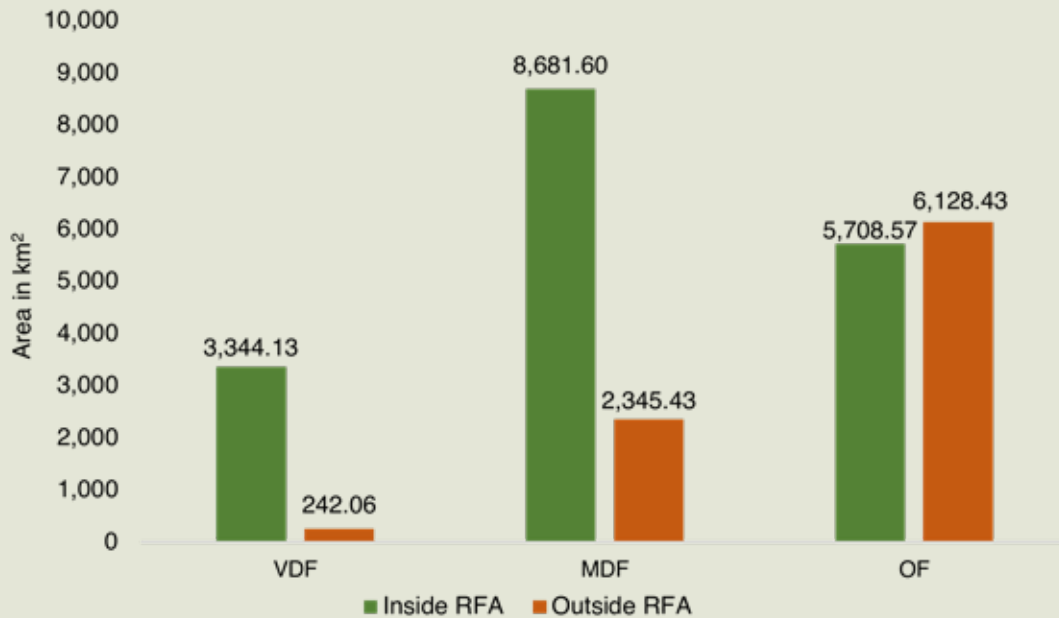


Figure 10.24.2 Forest Cover Inside and Outside of RFA in Tamil Nadu

Table 10.24.6 Forest Cover Change Matrix Inside RFA/GW for Tamil Nadu 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 | 3,343.53 | 1.63 | 0.35 | 0.00 | 0.98 | 3,346.49 |
| MDF | 0.04 | 8,675.59 | 1.31 | 1.62 | 11.41 | 8,689.97 |
| OF | 0.00 | 2.51 | 5,661.03 | 11.21 | 46.09 | 5,720.84 |
| Scrub | 0.00 | 0.00 | 4.64 | 425.32 | 4.95 | 434.91 |
| NF | 0.56 | 1.87 | 41.24 | 10.83 | 3,338.31 | 3,392.81 |
| Total ISFR 2023 inside RFA / GW | 3,344.13 | 8,681.60 | 5,708.57 | 448.98 | 3,401.74 | 21,585.02 |
| Net Change | -2.36 | -8.37 | -12.27 | 14.07 | 8.93 | |

**Area figure calculated without normalization factor.*

Table 10.24.7 Forest Cover Change Matrix Outside RFA/GW for Tamil Nadu between 2021 Raster based and 2023 Assessments

| Class | 2023 Assessment outside RFA/GW | | | | | Total ISFR 2021 outside RFA / GW Raster based* |
|---|--------------------------------|-----------------|-----------------|---------------|------------------|---|
| | VDF | MDF | OF | Scrub | NF | |
| VDF | 241.94 | 0.05 | 0.02 | 0.00 | 0.46 | 242.47 |
| MDF | 0.00 | 2,341.49 | 13.23 | 0.37 | 28.55 | 2,383.64 |
| OF | 0.00 | 0.56 | 5,843.67 | 11.55 | 271.99 | 6,127.77 |
| Scrub | 0.00 | 0.00 | 1.61 | 318.60 | 14.95 | 335.16 |
| NF | 0.12 | 3.33 | 269.90 | 98.79 | 99,013.80 | 99,385.94 |
| Total ISFR 2023 outside RFA/GW | 242.06 | 2,345.43 | 6,128.43 | 429.31 | 99,329.75 | 1,08,474.98 |
| Net Change | -0.41 | -38.21 | 0.66 | 94.15 | -56.19 | |

*Area figure calculated without normalization factor.

Table 10.24.8 Altitude-wise Forest Cover in Tamil Nadu

| Altitude Zone (m) | Calculated Area by Sol | VDF | MDF | OF | Total | Scrub |
|----------------------|---------------------------|-----------------|------------------|------------------|------------------|---------------|
| 0-500 | 1,11,060.00 | 346.59 | 5,052.06 | 8,618.63 | 14,017.28 | 718.88 |
| 500-1000 | 13,688.00 | 1,821.42 | 4,469.61 | 2,549.09 | 8,840.12 | 137.02 |
| 1000-2000 | 4,437.00 | 1,094.06 | 1,384.93 | 623.08 | 3,102.07 | 19.91 |
| 2000-3000 | 875.00 | 324.12 | 120.43 | 46.20 | 490.75 | 2.48 |
| Total | 1,30,060.00 | 3,586.19 | 11,027.03 | 11,837.00 | 26,450.22 | 878.29 |

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

Table 10.24.9 Forest Cover in Different Slope Classes in Tamil Nadu

| Slope (in degrees) | Calculated Area by Sol | VDF | MDF | OF | Total | Scrub |
|-----------------------|---------------------------|-----------------|------------------|------------------|------------------|---------------|
| 0-5 | 1,09,583.00 | 323.03 | 3,430.29 | 7,481.15 | 11,234.47 | 555.65 |
| 5-10 | 5,911.00 | 527.72 | 1,748.33 | 1,283.75 | 3,559.80 | 82.19 |
| 10-15 | 3,943.00 | 583.47 | 1,501.07 | 881.37 | 2,965.91 | 60.81 |
| 15-20 | 3,364.00 | 583.64 | 1,374.03 | 722.79 | 2,680.46 | 55.18 |
| 20-25 | 2,856.00 | 555.03 | 1,220.16 | 603.50 | 2,378.69 | 49.12 |
| 25-30 | 2,208.00 | 482.10 | 929.95 | 461.24 | 1,873.29 | 40.52 |
| > 30 | 2,195.00 | 531.20 | 823.20 | 403.20 | 1,757.60 | 34.82 |
| Total | 1,30,060.00 | 3,586.19 | 11,027.03 | 11,837.00 | 26,450.22 | 878.29 |

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

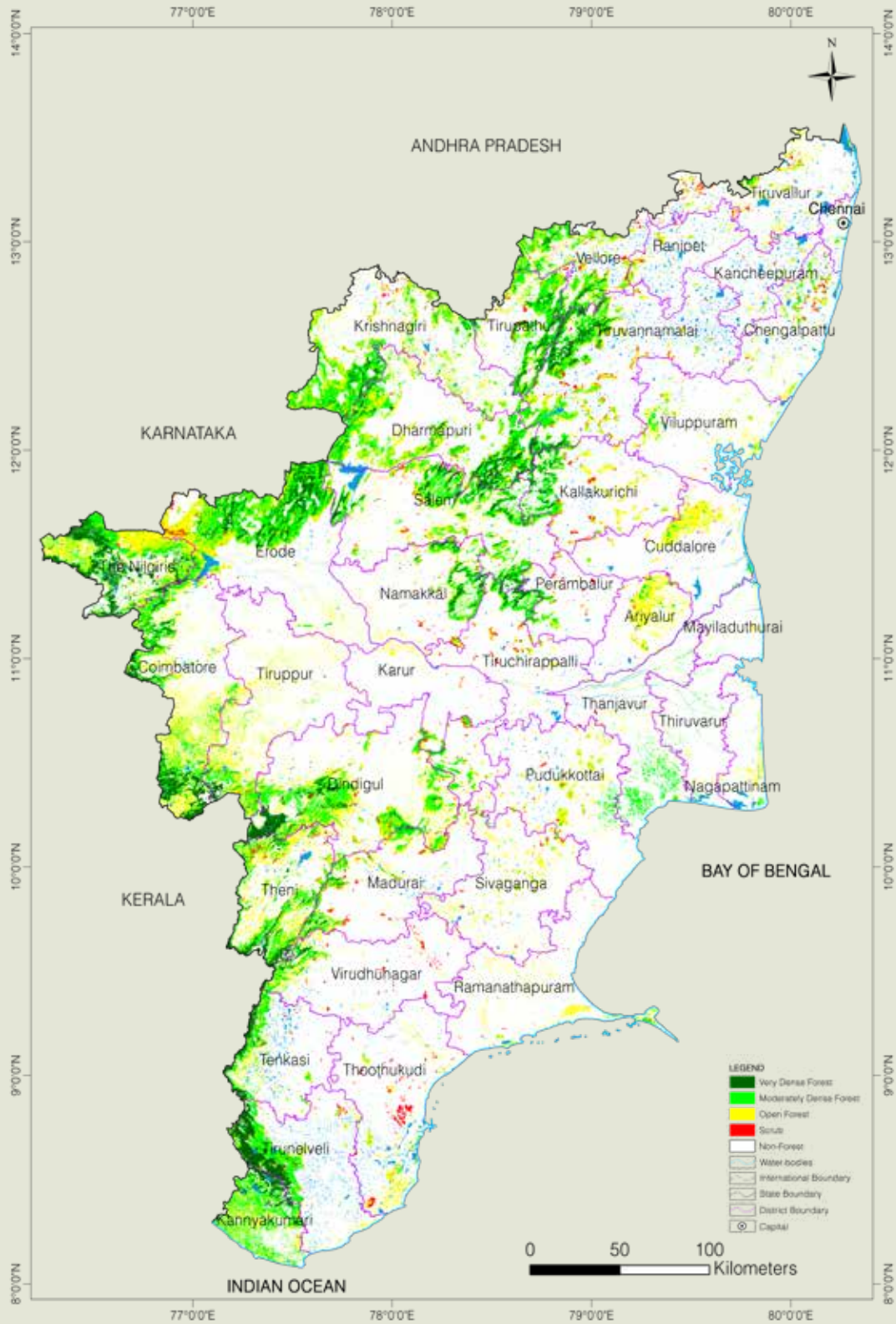


Figure 10.24.3 Forest Cover Map of Tamil Nadu

10.24.3 Forest Types

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

Table 10.24.10 Area Statistics of the Forest Types Found in Tamil Nadu

| (km ²) | | | |
|--------------------|--|----------|-----------------------------|
| Sl. No. | Forest Type | Area | % of the total mapped area* |
| 1 | 1A/C3 Southern hilltop tropical evergreen forest | 107.26 | 0.38 |
| 2 | 1A/C4 West Coast tropical evergreen forest | 681.19 | 2.44 |
| 3 | 2A/C2 West Coast semi-evergreen forest | 403.33 | 1.45 |
| 4 | 2A/C3 Tirunelveli semi-evergreen forest | 116.60 | 0.42 |
| 5 | 2/E3 Moist bamboo brakes | 328.56 | 1.18 |
| 6 | 3B/C1a Very moist teak forest | 59.20 | 0.21 |
| 7 | 3B/C1b Moist teak forest | 166.14 | 0.60 |
| 8 | 3B/C1c Slightly moist teak forest | 51.59 | 0.19 |
| 9 | 3B/C2 Southern moist mixed deciduous forest | 1,241.41 | 4.46 |
| 10 | 3B/C2/2S1 Southern secondary moist mixed deciduous forest | 259.02 | 0.93 |
| 11 | 4A/L1 Littoral Forest | 7.77 | 0.03 |
| 12 | 4B/TS1 Mangrove scrub | 28.00 | 0.10 |
| 13 | 4B/TS2 Mangrove forest | 20.81 | 0.07 |
| 14 | 4C/FS2 Submontane hill valley swamp forest | 1.93 | 0.01 |
| 15 | 4E/RS1 Riparian fringing forest | 36.69 | 0.13 |
| 16 | 5A/C1a Very dry teak forest | 0.91 | 0.00 |
| 17 | 5A/C1b Dry teak forest | 156.43 | 0.56 |
| 18 | 5A/C2 Dry red sanders-bearing forest | 10.73 | 0.04 |
| 19 | 5A/C3 Southern dry mixed deciduous forest | 6,246.63 | 22.42 |
| 20 | 5/DS1 Dry deciduous scrub | 938.98 | 3.37 |
| 21 | 5/DS2 Dry savannah forest | 260.82 | 0.94 |
| 22 | 5/DS3 <i>Euphorbia</i> scrub | 3.30 | 0.01 |
| 23 | 5/DS4 Dry grass land | 51.70 | 0.19 |
| 24 | 5/E4 <i>Hardwickia</i> forest | 440.61 | 1.58 |
| 25 | 5/E9 Dry bamboo brakes | 147.64 | 0.53 |
| 26 | 5/1S1 Dry tropical riverain forest | 110.64 | 0.40 |
| 27 | 5/2S1 Secondary dry deciduous forest | 2,749.37 | 9.87 |
| 28 | 6A/C1 Southern thorn forest | 1,851.58 | 6.65 |
| 29 | 6A/C2 Carnatic umbrella thorn forest | 1,459.40 | 5.24 |
| 30 | 6A/DS1 Southern thorn scrub | 516.91 | 1.86 |
| 31 | 6A/DS2 Southern <i>Euphorbia</i> scrub | 42.96 | 0.15 |
| 32 | 7/C1 Tropical dry evergreen forest | 302.53 | 1.09 |
| 33 | 7/DS1 Tropical dry evergreen scrub | 77.26 | 0.28 |
| 34 | 8A/C1 Nilgiri sub tropical hill forest | 173.39 | 0.62 |
| 35 | 8A/C1/DS1 South Indian sub-tropical hill savannah (woodland) | 18.73 | 0.07 |
| 36 | 8A/E1 Reed brakes (<i>Ochlandra</i>) | 3.08 | 0.01 |
| 37 | 11A/C1 Southern montane wet temperate forest | 185.14 | 0.66 |
| 38 | 11A/C1/DS1 Southern montane wet scrub | 3.81 | 0.01 |


Table 10.24.10 Area Statistics of the Forest Types Found in Tamil Nadu

| (km ²) | | | |
|---|---|------------------|-----------------------------|
| Sl. No. | Forest Type | Area | % of the total mapped area* |
| 39 | 11A/C1/DS2 Southern montane wet grassland | 19.10 | 0.07 |
| Sub Total | | 19,281.15 | 69.21 |
| 40 | TOF/ Plantation | 8,047.36 | 28.87 |
| Total (Forest Cover & Scrub) | | 27,328.51 | 98.08 |
| Grassland forest type (outside forest cover) | | | |
| 41 | 5/DS2 Dry savannah forest | 108.48 | 0.39 |
| 42 | 5/DS4 Dry grassland | 232.74 | 0.84 |
| 43 | 11A/C1/DS2 Southern montane wet grassland | 192.90 | 0.69 |
| Sub Total | | 534.12 | 1.92 |
| Grand Total | | 27,862.63 | 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). Grassland forest types outside forest cover have also been mapped. The total mapped area, therefore, is sum of forest cover, scrub and grassland forest types (found in non-forest).

10.24.4 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 10.24.11 District-wise Number of Forest Fire Detected

| Sl. No. | District | SNPP-VIIRS Detection during 2022-23 | SNPP-VIIRS Detection during 2023-24 |
|---------|----------------|-------------------------------------|-------------------------------------|
| 1 | Ariyalur | 4 | 2 |
| 2 | Chengalpattu | 8 | 4 |
| 3 | Chennai | 0 | 0 |
| 4 | Coimbatore | 162 | 13 |
| 5 | Cuddalore | 1 | 8 |
| 6 | Dharmapuri | 39 | 101 |
| 7 | Dindigul | 205 | 798 |
| 8 | Erode | 44 | 100 |
| 9 | Kallakurichi | 52 | 43 |
| 10 | Kancheepuram | 4 | 4 |
| 11 | Kanniyakumari | 178 | 118 |
| 12 | Karur | 0 | 1 |
| 13 | Krishnagiri | 277 | 348 |
| 14 | Madurai | 32 | 22 |
| 15 | Mayiladuthurai | 0 | 1 |
| 16 | Nagapattinam | 0 | 0 |
| 17 | Namakkal | 18 | 51 |
| 18 | Perambalur | 6 | 9 |
| 19 | Pudukkottai | 4 | 14 |
| 20 | Ramanathapuram | 1 | 1 |
| 21 | Ranipet | 50 | 58 |
| 22 | Salem | 29 | 90 |
| 23 | Sivaganga | 4 | 4 |

Table 10.24.11 District-wise Number of Forest Fire Detected

| Sl. No. | District | SNPP-VIIRS Detection during 2022-23 | SNPP-VIIRS Detection during 2023-24 |
|--------------|------------------|-------------------------------------|-------------------------------------|
| 24 | Tenkasi | 4 | 7 |
| 25 | Thanjavur | 3 | 2 |
| 26 | The Nilgiris | 100 | 400 |
| 27 | Theni | 215 | 171 |
| 28 | Thiruvarur | 0 | 0 |
| 29 | Thoothukudi | 4 | 2 |
| 30 | Tiruchchirapalli | 6 | 14 |
| 31 | Tirunelveli | 2 | 0 |
| 32 | Tirupathur | 104 | 322 |
| 33 | Tiruppur | 133 | 54 |
| 34 | Tiruvallur | 89 | 80 |
| 35 | Tiruvannamalai | 109 | 260 |
| 36 | Vellore | 102 | 249 |
| 37 | Viluppuram | 4 | 0 |
| 38 | Virudhunagar | 5 | 29 |
| Total | | 1,998 | 3,380 |

10.24.5 Fire Prone Forest Areas

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

Table 10.24.12 Forest Fire Prone Classes

| Sl. No. | Forest Fire Prone Classes | Forest Cover* | % of Total Forest Cover |
|--------------|---------------------------|------------------|-------------------------|
| 1 | Extremely fire prone | 0.00 | 0.00 |
| 2 | Very highly fire prone | 95.86 | 0.35 |
| 3 | Highly fire prone | 690.41 | 2.53 |
| 4 | Moderately fire prone | 1,699.73 | 6.22 |
| 5 | Less fire prone | 24,842.51 | 90.90 |
| Total | | 27,328.51 | 100.00 |

*Forest Cover including Scrub.

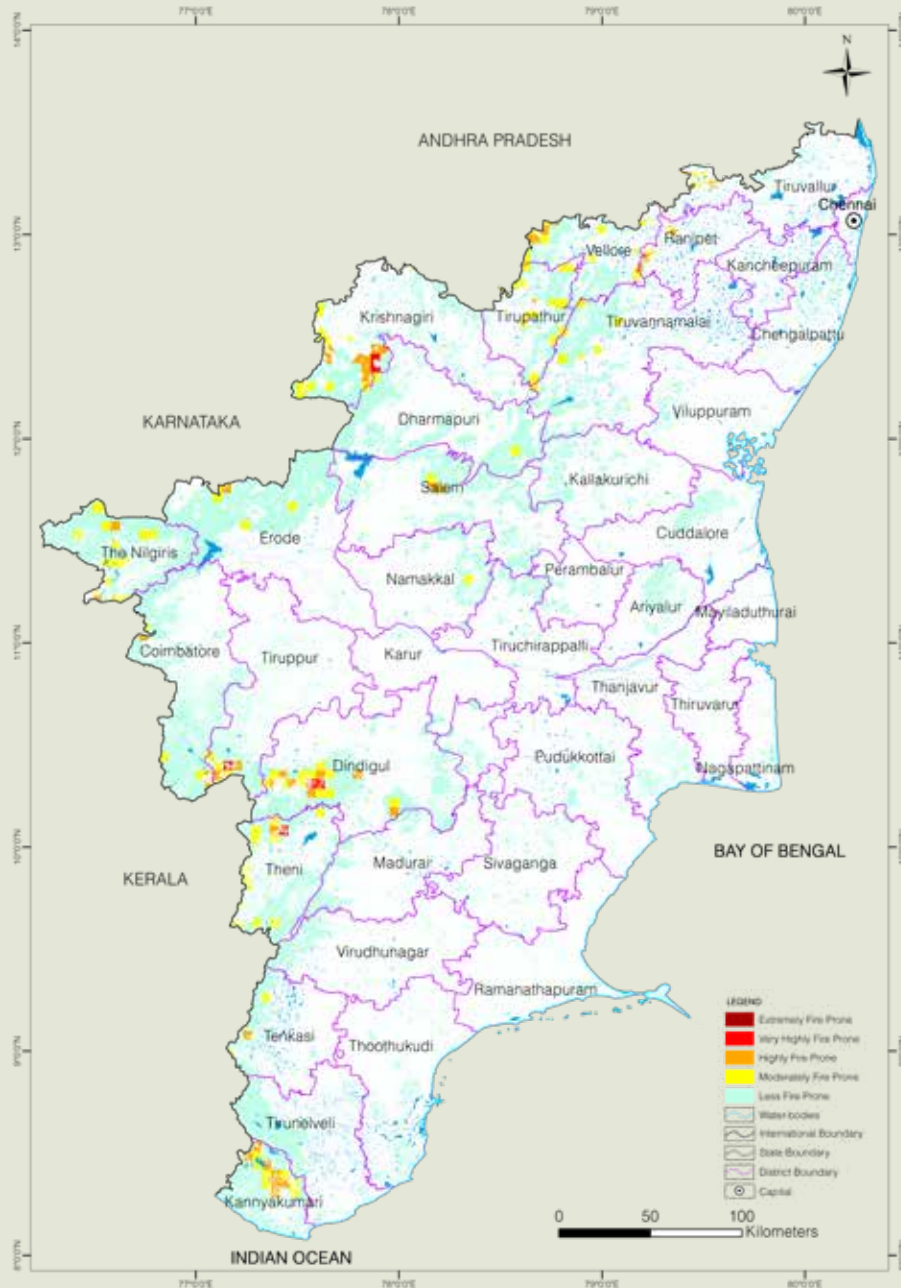


Figure 10.24.4 Fire Prone Forest Areas under Different Fire Prone Classes

10.24.6 Results Derived from NFI for Tamil Nadu

Table 10.24.13 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>Albizia amara</i> | 76,363 | 6.58 |
| 2 | <i>Anogeissus latifolia/ Terminalia anogeissiana</i> | 27,562 | 6.36 |
| 3 | <i>Commiphora species</i> | 18,187 | 2.90 |
| 4 | <i>Eucalyptus species</i> | 17,701 | 2.38 |
| 5 | <i>Chloroxylon swietenia</i> | 17,642 | 1.70 |



Table 10.24.14 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>Prosopis juliflora/ Neltuma juliflora</i> | 1,00,552 | 2.306 |
| 2 | <i>Cocos nucifera</i> | 80,370 | 22.455 |
| 3 | <i>Azadirachta indica</i> | 68,371 | 5.847 |
| 4 | <i>Borassus flabellifer/ Borassus flabelliformis</i> | 29,497 | 13.918 |
| 5 | <i>Mangifera indica</i> | 26,516 | 6.489 |

Table 10.24.15 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>Cocos nucifera</i> | 18,440 | 4.119 |
| 2 | <i>Azadirachta indica</i> | 10,647 | 1.838 |
| 3 | <i>Prosopis juliflora/ Neltuma juliflora</i> | 5,664 | 0.175 |
| 4 | <i>Moringa oleifera</i> | 5,483 | 0.340 |
| 5 | <i>Mangifera indica</i> | 3,608 | 1.208 |

Table 10.24.16 Major NTFP Species in Tamil Nadu

| Sl. No. | Species | Habit | No. of Plants (in '000) |
|---------|--|----------|-------------------------|
| 1 | <i>Albizia amara</i> | Tree | 9,10,036 |
| 2 | <i>Azadirachta indica</i> | Tree | 4,75,926 |
| 3 | <i>Murraya koenigii/ Bergera koenigii</i> | Tree | 4,05,545 |
| 4 | <i>Carissa carandas</i> | Tree | 3,41,514 |
| 5 | <i>Anogeissus latifolia/ Terminalia anogeissiana</i> | Tree | 3,37,870 |
| 6 | <i>Emblica officinalis/ Phyllanthus emblica</i> | Tree | 2,77,819 |
| 7 | <i>Ziziphus species</i> | Tree | 2,45,589 |
| 8 | <i>Solanum torvum</i> | Shrubs | 36,60,140 |
| 9 | <i>Cissus quadrangularis</i> | Climbers | 8,76,908 |
| 10 | <i>Cymbopogon citratus</i> | Herbs | 3,74,67,101 |

Table 10.24.17 Major invasive Species in the State inside the RFA in Tamil Nadu

| Sl. No. | Species | Estimated Extent (km ²) |
|---------|--|-------------------------------------|
| 1 | <i>Lantana camara</i> | 2,045.96 |
| 2 | <i>Chromolaena odorata</i> | 962.59 |
| 3 | <i>Prosopis juliflora/ Neltuma juliflora</i> | 166.42 |
| 4 | <i>Ageratum conyzoides</i> | 130.00 |
| 5 | <i>Cuscuta spp.</i> | 111.10 |