

# Inventory Degraded Land of Dharmapuri District, Tamil Nadu using Remote Sensing Techniques

## ABSTRACT

1. (a) Kind of Survey : Land Degradation Mapping  
 (b) Level of Mapping : Reconnaissance  
 (c) Scale of Mapping : 1:50,000
2. Period of Survey : March 95 – April, 95
3. Base Material : IRS – 1A, LISS II, False Colour Composite (FCC)  
 : Toposheet of Survey of India, Scale 1:50,000
4. (a) Total Area of District : 962247 hectare  
 (b) Agro Climatic Region : No.10 (Southern, Plateau and Hill Region)  
 (c) Geographical Extent : 11°-46'-21" to 12°-53 '23" N. Latitude  
 77°-28'-34" to 78°-44 '13" E. ~~Latitude~~ *Longitude*

### 5. Statement Showing Nature Extent and Percentage of Degraded Lands in the District.

| S.No. | Type of Degradation | Landuse wise Distribution  |                            |                          |                         |                          | Total                    |
|-------|---------------------|----------------------------|----------------------------|--------------------------|-------------------------|--------------------------|--------------------------|
|       |                     | Agriculture                | Forest                     | Open Scrub/<br>Pasture   | Plantation              | Misc.                    |                          |
| 1.    | Water Erosion       | 139250<br>(14.47%)         | 21278<br>(2.21%)           | 8700<br>(0.90%)          | -                       | -                        | 169228<br>(17.58%)       |
| 2.    | Salinity            | 22498<br>(2.34%)           | 336<br>(0.03%)             | 842<br>(0.08%)           | -                       | -                        | 23676<br>(2.45%)         |
| 3.    | Water Logging       | 1628<br>(0.17%)            | -                          | -                        | -                       | -                        | 1628<br>(0.17%)          |
| 4.    | Normal Land         | 439858<br>(45.71%)         | 234143<br>(24.33%)         | 57491<br>(5.97%)         | 2335<br>(0.24%)         | -                        | 733827<br>(76.26%)       |
| 5.    | Miscellaneous       | -                          | -                          | -                        | -                       | 33888<br>(3.52%)         | 33888<br>(3.52%)         |
| 6.    | <b>Grand Total</b>  | <b>603234<br/>(62.69%)</b> | <b>255757<br/>(26.57%)</b> | <b>67033<br/>(6.95%)</b> | <b>2335<br/>(0.24%)</b> | <b>33888<br/>(3.52%)</b> | <b>962247<br/>(100%)</b> |

## **Salient Features/Findings**

- Around 20% of the total district area (9.6 lakhs ha) suffers from various kinds of land degradation.
- Land degradation due to water erosion accounts for 17.58% (1.69 lakhs ha) land use wise. 1,63,346 ha area (16.97%) is degraded in agriculture land, 21614 ha area (2.24%) in forest land and 9542 ha area (1%) in open scrub land is degraded.
- Degradation due to salinity and alkalinity and water logging encompasses an area of 23676 ha (2.45%) and 1628 ha (0.18%) respectively.
- The area under severe and very severe (sheet and hill) erosion accounts for 167474 ha (17.40%).
- Only 1774 ha (0.18%) area of the district is under gullied land.
- An area of 139250 (14.47%) suffers from degradation under agriculture due to water induced soil erosion.
- Salinity, alkalinity and water logging problems are confirmed to agriculture land use.
- Only 21614 (2.24%) area suffers from land degradation under forest land use.
- Remote Sensing is found to be an important tool to generate real time information on degradation lands and required interturning.