**Tamil Nadu**

Tamil Nadu comprises of three Agro Ecological Regions (AER) 8,18 & 19.

**Agro-Eco Region 8:** AER 8 in Tamil Nadu comprises of Ariyalur, Coimbatore, Cuddalore , Dharampuri, Dindigul, Erode, Kanyakumari, Kanchipuram, Karur, Krishnagiri, Madurai, Namakkal, Perambalur, Pudukkottai, Ramanathapuram, Salem, Sivaganga, Teni, Thanjavur, Tirunelveli, Tiruppur, Tiruchirappalli, Tiruvallur, Tiruvannamalai, Tuticorin, Vellore, Villupuram and Virudhunagar districts of Eastern Ghats under Agro Ecological Sub Regions (AESR) 8.1,8.2 & 8.3.

**Agro-Eco Region 18:** AER18 in Tamil Nadu comprises of Chennai, Nagapattinam, Ramanathapuram, Thiruvarur, Cuddalore, Kanchipuram and Tiruvallur districts of Eastern Coastal Plain under Agro Ecological Sub Regions (AESR)18.1 &18.2 .

**Agro-Eco Region 19:** AER19 in Tamil Nadu comprises of Coimbatore, Kanyakumari and Nilgiri districts of Western Ghats & Coastal Plain under Agro Ecological Sub Regions (AESR)19.2 & 19.3.

**Major NRM issues :**

**AESR 8.1:** The region is hot dry semi-arid ESR with moderately deep to deep, loamy to clayey, mixed Red and Black soils, medium AWC and LGP 90-120 days in a year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Coimbatore | Exclusively water erosion | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F & NO3 |  |
| Dindigul | **-** | Low in OC, Soil Deficient in N | Saline GW Contaminated with F, NO3 & heavy metals |  |
| Kanyakumari | **-** | Low in OC, Soil Deficient in N | GW Contaminated with NO3 |  |
| Madurai | **-** | Low in OC, Soil Deficient in N | GW Contaminated with NO3 |  |
| Ramanathapuram | Waterlogged & Coastal Salinity | Low in OC, Soil Deficient in N | Saline GW Contaminated with F, NO3, As& Fe |  |
| Teni | Exclusively water erosion | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F, NO3 & heavy metals |  |
| Tirunelveli | Waterlogged & Coastal Salinity | Low in OC, Soil Deficient in N | Saline GW Contaminated with F, NO3 & As |  |
| Tiruppur | Exclusively water erosion | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F & NO3 |  |
| Tuticorin | **-** | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F, NO3 & As |  |
| Virudhunagar | **-** | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F & NO3 |  |

**AESR 8.2:** The region hot moist semi-arid ESR with medium to deep Red loamy soils, low AWC and LGP 120-150 days in a year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Krishnagiri | **-** | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F |  |

**AESR 8.3:** The region is hot dry semi-arid ESR with moderately deep to deep, loamy to clayey, mixed Red and Black soils, medium AWC and LGP 90-120 days in a year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Ariyalur | - | Low in OC & Soil Deficient in N | GW Contaminated with As |  |
| Cuddalore | Waterlogged & Coastal Salinity | Low in OC & Soil Deficient in N | Saline GW Contaminated with NO3, As & heavy metals |  |
| Dharampuri | - | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F & NO3 |  |
| Erode | - | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F , NO3 & heavy metals |  |
| Kanchipuram | Coastal Salinity - | Low in OC & Soil Deficient in N | Saline GW Contaminated with F , NO3 & heavy metals |  |
| Karur | - | Low in OC & Soil Deficient in N | Saline GW Contaminated with F & NO3 |  |
| Krishnagiri | - | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F |  |
| Namakkal | - | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F , NO3 & Fe |  |
| Perambalur | Exclusively water erosion | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F & NO3 |  |
| Pudukkottai | Coastal Salinity | Low in OC & Soil Deficient in N | Saline GW Contaminated with F , NO3 |  |
| Salem | Waterlogged | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F , NO3 |  |
| Sivaganga | - | Low in OC & Soil Deficient in N | Saline GW Contaminated with F , NO3 |  |
| Thanjavur | Waterlogged | Low in OC & Soil Deficient in N | Saline GW Contaminated with F , NO3 |  |
| Tiruchirappalli | - | Low in OC & Soil Deficient in N | Saline GW Contaminated with As |  |
| Tiruvallur | - | Low in OC & Soil Deficient in N | Saline GW Contaminated with F , NO3 , As & heavy metals |  |
| Tiruvannamalai | - | Low in OC & Soil Deficient in N | Saline GW Contaminated with F & NO3 |  |
| Tuticorin | - | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F , NO3 & As |  |
| Vellore | - | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F & As |  |
| Villupuram | - | Low in OC & Soil Deficient in N | Saline GW Contaminated with F & NO3 |  |

**AESR 18.1:** The region hot dry semi-arid ESR with deep, loamy to clayey, alkaline Coastal and deltaic alluvium-derived soils, medium AWC and LGP 90-120 days in a year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Ramanathapuram | Waterlogged & Coastal Salinity | Low in OC, Soil Deficient in N | Saline GW Contaminated with F , NO3 & As |  |

**AESR 18.2:** The region hot dry semi-arid ESR with deep, loamy to clayey, alkaline Coastal and deltaic alluvium-derived soils, medium AWC and LGP 90-120 days in a year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Chennai | **-** | **-** | Saline GW Contaminated with NO3 |  |
| Nagapattinam | Waterlogged | **-** | Saline GW Contaminated with NO3 & As |  |
| Thiruvarur | **-** | Low in OC & Soil Deficient in N | Saline GW Contaminated with F & As |  |

**AESR 19.2:** The region is hot moist subhumid to humid transitional ESR with deep, loamy to clayey Red and Lateritic soils, low to medium AWC and LGP 210-270 days in a year.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Coimbatore | Exclusively water erosion | Low in OC, Soil Deficient in N & P | Saline GW Contaminated with F & NO3 |  |
| Kanyakumari | **-** | Low in OC & Soil Deficient in N | - |  |
| Nilgiri | **-** |  | GW Contaminated with NO3 |  |