**Goa**

Goa comprises of one Agro Ecological Region (AER)19.

**Agro-Eco Region 19 :** AER 19 in Goa comprises of North Goa, South Goa districts of Western Ghats & Coastal Plain under Agro Ecological Sub Regions (AESR) 19.2 and 19.3.

**AESR 19.2 :** The region 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.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| North Goa | Waterlogged | Soil deficient in N & P | GW Contaminated with Fe | **-** |
| South Goa | Waterlogged | Soil deficient in P & S | GW Contaminated with Fe | **-** |

**AESR 19.3 :** The region hot humid to per humid transitional ESR with deep, clayey to loamy acidic coastal alluvium-derived soils, low AWC and LGP 240-270 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| North Goa | Waterlogged | Soil deficient in N & P | GW Contaminated with Fe | **-** |
| South Goa | Waterlogged | Soil deficient in P & S | GW Contaminated with Fe | **-** |

**Gujrat**

Gujrat comprises of five Agro Ecological Regions (AER) 2,4,5,6 and 19.

**Agro-Eco Region 2:** AER 2 in Gujrat comprises of Banaskantha, Jamnagar, Patna, Rajkot, Kachchh, Surendranagar and Porbandar districts of Western Plain under Agro Ecological Sub Regions (AESR) 2.2, 2.3 and 2.4.

**Agro-Eco Region 4:** AER 4 in Gujrat comprises of Ahmadabad, Gandhinagar, Khera, Mahesana, Sabar Kantha and Surendra nagar districts of Northern Plain and Central Highlands including Aravall is under Agro Ecological Sub Regions (AESR) 4.2.

**Agro-Eco Region 5:** AER 5 in Gujrat comprises of Rajkot, Khera, Anand, Bharuch, Dahod, Panchhmahal, Narmada, Surat, Tapi, Junagarh, Bhavnagar and Vadodra districts of Gujarat Plains & Kathiawar Peninsula under Agro Ecological Sub Regions (AESR) 5.1,5.2 and 5.3.

**Agro-Eco Region 6:** AER 6 in Gujrat comprises of Dangs district of Deccan Plateau under Agro Ecological Sub Regions (AESR) 6.2.

**AESR 2.2 :** The region is hot hyper-arid ESR with deep loamy saline and alkali soils, low AWC and LGP <60 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Kachchh | Mining /Industrial waste & Coastal Salinity | Soil deficient in N & Fe | Saline, GW Contaminated with F, NO3, As & Fe | Extreme Drought |

**AESR 2.3 :** The region is hot typic- arid ESR with deep, loamy desert soils (inclusion of saline phase), low AWC and LGP 60-90 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Banas kantha | **-** | Low in OC & Soil deficient in N | Saline, GW Contaminated with F, NO3 & Fe | Moderate Drought |
| Patan | Salt affected soils | Soil deficient in N, Zn, B & S | Saline, GW Contaminated with F, NO3 &As | Extreme Drought |

**AESR 2.4 :** The region is hot arid ESR with deep loamy saline and alkali soils, low AWC and LGP 60-90 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Jamnagar | Mining /Industrial waste | Soil deficient in N | Saline, GW Contaminated with F & NO3 | Severe Drought |
| Kachchh | Mining /Industrial waste & Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F, NO3, As & Fe | Extreme Drought |
| Rajkot | Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F, NO3 & As | Extreme Drought |
| Surendranagar | Mining /Industrial waste & Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F, NO3 & As | Severe Drought |
| Porbandar | - | Soil deficient in N | Saline, GW Contaminated with F & NO3 | - |

**AESR 4.2 :** The region is hot dry semiarid ESR with deep loamy Gray Brown and alluvium-derived soils, medium AWC and LGP 90-120 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Ahmadabad | **-** | Low in OC & Soil deficient in N | Saline, GW Contaminated with F, NO3 & Fe | Extreme Drought |
| Gandhinagar | **-** | Low in OC & Soil deficient in N | GW Contaminated with F& As | **-** |
| Khera | Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F & NO3 | **-** |
| Mahesana | **-** | Low in OC & Soil deficient in N | Saline, GW Contaminated with F, NO3, As & Fe | Severe Drought |
| Sabar Kantha | **-** | Low in OC & Soil deficient in N | Saline, GW Contaminated with F & NO3 | Severe Drought |
| Surendranagar | Mining /Industrial waste & Coastal Salinity | Low in OC & Soil deficient in N | Saline, GW Contaminated with F, NO3 & As | Severe Drought |

**AESR 5.1 :** The region dry semiarid ESR with shallow and medium loamy to clayey black soils (deep black soils as inclusion) medium AWC and LGP 120-150 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Amreli | Mining /Industrial waste & Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F, NO3, As & Fe | Extreme Drought |
| Bhavnagar | Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F, NO3, As & Fe | Extreme Drought |
| Junagarh | Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F & NO3 | **-** |
| Porbandar | - | Soil deficient in N | Saline, GW Contaminated with F, NO3, As & Fe | **-** |
| Rajkot | Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F & NO3 | Extreme Drought |

**AESR 5.2:** The region is hot moist semi-arid ESR with medium and deep, clayey Black soils (shallow black soils as inclusions), medium to high AWC and LGP 120-150 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Khera | Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F & NO3 | **-** |
| Anand | - | Soil deficient in N | Saline, GW Contaminated with F, NO3 & As | **-** |
| Bharuch | Mining /Industrial waste & Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F, NO3, As & Fe | Extreme Drought |
| Dahod | - | Soil deficient in N | Saline GW Contaminated with F, NO3 & As | **-** |
| Panchmahal | - | Soil deficient in N | GW Contaminated with F & NO3 | **-** |
| Narmada | - | Low in OC & Soil deficient in N | Saline, GW Contaminated with NO3 & Fe | Extreme Drought |
| Surat | Mining /Industrial waste & Coastal Salinity | **-** | Saline, GW Contaminated with F & NO3 | Severe Drought |
| Tapi | - | Soil deficient in N | - | **-** |
| Vadodara | - | Low in OC & Soil deficient in N | Saline, GW Contaminated with F, NO3 & As | Moderate Drought |

**AESR 5.3 :** The region is hot moist semi-arid ESR with deep loamy coastal alluvium-derived soils (saline/phases inclusion), low to medium AWC and LGP 120-150 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Bhavnagar | Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F, NO3, As & Fe | Extreme Drought |
| Junagarh | Coastal Salinity | Soil deficient in N | Saline, GW Contaminated with F & NO3 | - |

**AESR 6.2 :** The hot moist semi-arid ESR with shallow and medium loamy to clayey Black soils (medium land deep clayey Black soils as inclusion), medium to high AWC and LGP 120-150 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Dangs | Exclusively water erosion | **-** | GW Contaminated with NO3 | **-** |