**Major NRM issues :**

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

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| **Districts** | **Land degradation** | **Soil health & fertility** | **Water related constraints** | **Environmental constraints** |
| Kachchh | Exclusively Saline Soils, Saline soils under open forest | Soil deficient in N & Fe | Saline, GW Contaminated with F, NO3, As & Fe | Moderately prone to flood, drought & cyclone |

**AESR 2.3 :** 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.

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| **Districts** | **Land degradation** | **Soil health & fertility** | **Water related constraints** | **Environmental constraints** |
| Banas kantha | Exclusively water erosion, Exclusively saline soils & Exclusively sodic soils | Low in OC, Soil deficient in P & N | GW Saline, Contaminated with F, NO3 & Fe | Moderately prone to flood & drought |
| Patan | Exclusively saline soils & Exclusively sodic soils | Soil deficient in N, Zn, B & S | GW Saline, Contaminated with F, NO3 &As | Extreme Drought |

**AESR 2.4 :** 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.

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| **Districts** | **Land degradation** | **Soil health & fertility** | **Water related constraints** | **Environmental constraints** |
| Jamnagar | Exclusively saline soils | Soil deficient in N,S & K | GW Saline, Contaminated with F & NO3 | Moderately prone to flood, drought & cyclone |
| Kachchh | Exclusively Saline Soils, Saline soils under open forest | Soil deficient in N, Fe & S | GW Saline, Contaminated with F, NO3, As & Fe | Moderately prone to flood, drought & cyclone |
| Rajkot | Exclusively Saline Soils | Soil deficient in N & B | GW Saline, Contaminated with F, NO3 & As | Highly prone to flood, drought & cyclone |
| Surendranagar | Exclusively water erosion, Exclusively saline soils & Exclusively sodic soils | Soil deficient in N, Zn, Fe, B & S | GW Saline, Contaminated with F, NO3 & As | Highly prone to drought & flood |
| Porbandar | Exclusively water erosion | Low in OC, Soil deficient in N, Zn, Fe, B & S | GW Saline, Contaminated with F & NO3 | - |

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

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| **Districts** | **Land degradation** | **Soil health & fertility** | **Water related constraints** | **Environmental constraints** |
| Ahmadabad | Exclusively saline soils & Exclusively sodic soils | Low in OC, Soil deficient in N & B | GW Saline, Contaminated with F, NO3 & Fe | Highly prone to drought & flood |
| Gandhinagar | Exclusively water erosion | Low in OC, Soil deficient in N, Zn, Fe, B & S | GW Contaminated with F& As | - |
| Khera | Exclusively water erosion | Low in OC, Soil deficient in N, Zn & S | GW Saline,Contaminated with F & NO3 | - |
| Mahesana | Exclusively sodic soils | Low in OC, Soil deficient in N & B | GW Saline, Contaminated with F, NO3, As & Fe | Moderately prone to flood & drought |
| Sabar Kantha | **-** | Low in OC, Soil deficient in N, Zn, B & S | GW Saline, Contaminated with F & NO3 | - |
| Surendranagar | Exclusively water erosion, Exclusively saline soils & Exclusively sodic soils | Low in OC, Soil deficient in N, Zn, Fe, B & S | GW Saline, Contaminated with F, NO3 & As | Highly prone to drought & flood |

**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.

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| **Districts** | **Land degradation** | **Soil health & fertility** | **Water related constraints** | **Environmental constraints** |
| Amreli | Exclusively water erosion | Soil deficient in N, Zn, Fe, B & S | GW Saline, Contaminated with F, NO3, As & Fe | Moderately prone vulnerability to Drought |
| Bhavnagar | Exclusively saline soils | Soil deficient in N, Zn & B | GW Saline, Contaminated with F, NO3, As & Fe | Extreme Drought |
| Junagarh | Exclusively saline soils | Soil deficient in N, Zn, Fe, B & S | GW Saline, Contaminated with F & NO3 | **-** |
| Porbandar | Exclusively water erosion | Soil deficient in N, Zn, Fe, B & S | GW Saline, Contaminated with F, NO3, As & Fe | **-** |
| Rajkot | Exclusively saline soils | Soil deficient in N & B | GW Saline, Contaminated with F & NO3 | Highly prone to flood, drought & cyclone |

**AESR 5.2:** 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.

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| **Districts** | **Land degradation** | **Soil health & fertility** | **Water related constraints** | **Environmental constraints** |
| Anand | Exclusively water erosion | Soil deficient in N, Zn & B | GW Saline, Contaminated with F, NO3 & As | Moderately prone to flood |
| Bharuch | Mining /Industrial waste | Soil deficient in N, Zn & B | GW Saline, Contaminated with F, NO3, As & Fe | Extreme Drought |
| Dahod | Exclusively water erosion | Soil deficient in N, Zn, B & S | GW Saline Contaminated with F, NO3 & As | **-** |
| Khera | **-** | Low in OC, Soil deficient in N, Zn & S | GW Saline, Contaminated with F & NO3 | **-** |
| Narmada | **-** | Low in OC, Soil deficient in N, Zn, Fe, B & S | GW Saline, Contaminated with NO3 & Fe | Extreme Drought |
| Panchmahal | **-** | Low in OC, Soil deficient in N, Zn, Fe, B & S | GW Contaminated with F & NO3 | **-** |
| Surat | Mining /Industrial waste | Soil deficient in N, Zn & B | GW Saline, Contaminated with F & NO3 | Severe Drought |
| Tapi | **-** | Soil deficient in N & B | - | **-** |
| Vadodara | **-** | Low in OC & Soil deficient in N | GW Saline, Contaminated with F, NO3 & As | Moderate Drought |

**AESR 5.3 :** The region 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.

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| **Districts** | **Land degradation** | **Soil health & fertility** | **Water related constraints** | **Environmental constraints** |
| Bhavnagar | Coastal Salinity | Soil deficient in N, Zn & B | Saline, GW Contaminated with F, NO3, As & Fe | Extreme Drought |
| Junagarh | Coastal Salinity | Soil deficient in N, Zn, Fe, B & S | Saline, GW Contaminated with F & NO3 | Moderately prone to Drought & Cyclone |

**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.

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| **Districts** | **Land degradation** | **Soil health & fertility** | **Water related constraints** | **Environmental constraints** |
| Dangs | Exclusively water erosion | Soil deficient in Zn, S & B | GW Contaminated with NO3 | **-** |

**AESR 19.1 :** The region is hot humid ESR with medium to deep loamy to clayey mixed Red and Black soils, medium to high AWC and LGP 210-240 days in a year.

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| **Districts** | **Land degradation** | **Soil health & fertility** | **Water related constraints** | **Environmental constraints** |
| Dangs | Exclusively water erosion | Soil deficient in Zn, S & B | GW Contaminated with NO3 | **-** |
| Navsari | Exclusively water erosion | Soil deficient in N | Saline & GW Contaminated with F | - |
| Valsad | Exclusively water erosion | Soil deficient in N, Zn, S & B | GW Contaminated with Fe | - |