**Jammu & Kashmir**

Jammu & Kashmir comprises of two Agro Ecological Regions (AER)1 and 14.

**Agro-Eco Region1:** AER 1 in Jammu & Kashmir comprises of Leh & Ladakh and Gilgit districts of Western Himalayas under Agro Ecological Sub Regions (AESR) 1.1 and 1.2.

**Agro-Eco Region14:** AER 14 in Jammu & Kashmir comprises of Tribal Territory, Chilas, Gilgit Wazarat, Muzaffarabad, Anantnag, Punch, Kathua, Jammu, Udhampur, Muzaffarabad, Baramula and Riasi districts of Western Himalayas under Agro Ecological Sub Regions (AESR) 14.1 and 14.2.

**AESR 1.1 :** The region is cold, hyper-arid eco subregion (ESR) with shallow skeletal soils, very low AWC and LGP <60 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Leh & Ladakh | **-** |  | - | **-** |

**AESR 1.2:** The region is cold to cool, typic-arid ESR with shallow, loamy skeletal 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*** |
| Gilgit | **-** |  | - | **-** |
| Leh& Ladakh | **-** |  | - | **-** |

**AESR 14.1:** The region is cold and warm by dry semi-arid/dry subhumid ESR with shallow to medium deep loamy Brown Forest and Podzolic soils, low to medium AWC and LGP 90-120 days in a year.

**Major NRM issues:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Anantnag | Exclusively water erosion &waterlogged | Soil deficient in K | GW Contaminated with NO3 | **-** |
| Chilas | **-** | **-** | - | **-** |
| Gilgit Wazarat | **-** | **-** | - | **-** |
| Muzaffarabad | **-** | **-** | - | **-** |
| Tribal Territory | **-** | **-** | - | **-** |

**AESR 14.2:** The region is warm moist to dry subhumid transitional ESR with medium to deep loamy to clayey Brown Forest and Podzolic soils, medium AWC and LGP 150-210 days in a year.

**Major NRM issues:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Anantnag | Exclusively water erosion &Waterlogged | **-** | GW Contaminated with NO3 | **-** |
| Baramula | **-** | **-** | - | **-** |
| Jammu | **-** | Soil deficient in P | GW Contaminated with F, NO3,As, Fe & Heavy Metals | **-** |
| Kathua | **-** | Soil deficient in P & K | GW Contaminated with F, NO3,As, Fe & Heavy Metals | **-** |
| Muzaffarabad | **-** | **-** | - | **-** |
| Punch | **-** | Soil deficient in P | - | **-** |
| Riasi | **-** | Soil deficient in P | - | **-** |
| Udhampur | Exclusively water erosion | **-** | GW Contaminated with Fe | Extreme Drought |

**Jharkhand**

Jharkahand comprises of four Agro Ecological Regions (AER) 11,12,13 and 15.

**Agro-Eco Region11 :** AER11 in Jharkand comprises of Chatra, Garhwal, Gumla, Hazaribagh, Kodarma, Latehar, Lohardaga, Palamu, Simdega and Ranchidistricts of Eastern Plateau under Agro Ecological Sub Region (AESR) 11.

**Agro-Eco Region12:** AER12 in Jharkand comprises of Bokaro, Devgarh, Dhanbad, Dumka, Giridih, Jamtara, Pakur, Paschim Singhbhumi, Purbi Singhbhumi, Saraikela, Ramgarh, Kunti, Sahebganj and Ranchi districts of Eastern Plateau under Agro Ecological Sub Region (AESR) 12.3.

**Agro-Eco Region13 :** AER13 in Jharkand comprises of Gooda and Sahebganj districts of Eastern Plain under Agro Ecological Sub Region (AESR) 13.1.

**Agro-Eco Region15 :** AER15 in Jharkand comprises of Pakur and Sahebganj districts of Bengal and Assam Plain under Agro Ecological Sub Region (AESR) 15.1.

**AESR 11:** The region ishot moist/dry subhumid transitional ESR with deep loamy to clayey Red and Yellow soils, medium AWC and LGP 150-180 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Chatra | **-** | Low in OC &Soil deficient in N | GW Contaminated with NO3 & Fe | **-** |
| Garhwal | **-** | Soil deficient in K | GW Contaminated with F & NO3, | Extreme Drought |
| Gumla | **-** | Soil deficient in N &P | GW Contaminated with F & NO3 | **-** |
| Hazaribagh | **-** | Low in OC, Soil deficient in N & P | - | **-** |
| Kodarma | **-** | Low in OC, Soil deficient in N, P & K | GW Contaminated with F | **-** |
| Latehar | **-** | Low in OC, Soil deficient in N & P | - | **-** |
| Lohardaga | **-** | Soil deficient in N & P | GW Contaminated with NO3 & Fe | **-** |
| Palamu | **-** | Soil deficient in P & K | GW Contaminated with F & NO3 | **-** |
| Ranchi | Exclusively water erosion | Soil deficient in N & P | GW Contaminated with F, NO3 & Fe | **-** |
| Simdega | **-** | Soil deficient in N & P | - | **-** |

**AESR 12.3:** The region is hot moist/dry subhumid transitional ESR with deep loamy to clayey Red and Yellow soils, medium AWC and LGP 150-180 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Bokaro | Exclusively water erosion | Soil deficient in P | GW Contaminated with F | **-** |
| Devgarh | Exclusively water erosion | **-** | GW Contaminated with Fe | **-** |
| Dhanbad | Exclusively water erosion | Soil deficient in K | GW Contaminated with F | **-** |
| Dumka | Exclusively water erosion | Low in OC, Soil deficient in N, K & P | - | **-** |
| Giridih | Exclusively water erosion | Soil deficient in N &P | GW Contaminated with F | **-** |
| Jamtara | Exclusively water erosion | Soil deficient in N & P | - | **-** |
| Kunti | Exclusively water erosion | Soil deficient in P | GW Contaminated with F | **-** |
| Pakur | Waterlogged | Soil deficient in N &K | GW Contaminated with F & NO3 | **-** |
| Paschim Singhbhumi | Waterlogged | Soil deficient in N &K | GW Contaminated with NO3 | **-** |
| Purbi Singhbhumi | Waterlogged | Soil deficient in N, K & P | GW Contaminated with NO3 & Fe | **-** |
| Ramgarh | Exclusively water erosion | Soil deficient P | - | **-** |
| Ranchi | Exclusively water erosion | Soil deficient in N | GW Contaminated with F, NO3 & As | **-** |
| Sahebganj | **-** | Soil deficient in P | GW Contaminated with F, NO3 & Fe | **-** |
| Saraikela | Exclusively water erosion | Soil deficient in N & P | - | **-** |

**AESR 13.1 :**The region is hot dry to moist subhumid transitional ESR with deep, loamy alluvium-derived soils, low to medium AWC and LGP 180-210 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Gooda | Exclusively water erosion | Soil deficient in N& P | GW Contaminated with F & NO3 |  |
| Sahebganj | Exclusively water erosion | Soil deficient in P | GW Contaminated with F, NO3 & Fe |  |

**AESR 15.1 :** The region is hot moist subhumid ESR with deep loamy to clayey alluvium-derived soils, medium to high AWC and LGP 210-240 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Pakur | Waterlogged | Soil deficient in N& K | GW Contaminated with F & NO3 |  |
| Sahebganj | - | Soil deficient in P | GW Contaminated with F, NO3 & Fe |  |