**Jammu & Kashmir**

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

**Agro-Eco Region 1 :**

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.

**AESR 1.1 :** The region is cold, hyper-arid ecosubregion (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 | **-** |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Leh & Ladakh |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Leh & Ladakh |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Leh & Ladakh |  |  |

**Important Links :**

*District Soil nutrient status:*

*District Contingency Plan:*

*District Irrigation Plan:*

*District ground water status:*

*District Vulnerability status:*

***Relevant Research Institutes/SAUs/KVKs/STL for technical backstopping:***

|  |  |
| --- | --- |
| **Districts** |  |
| 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*** |
| Leh & Ladakh | **-** |  |  |  |
| Gilgit | **-** |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Leh & Ladakh |  |
| Gilgit |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Leh AND Ladakh |  |
| Gilgit |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Leh & Ladakh |  |  |
| Gilgit |  |  |

**Important Links :**

*District Soil nutrient status:*

*District Contingency Plan:*

*District Irrigation Plan:*

*District ground water status:*

*District Vulnerability status:*

***Relevant Research Institutes/SAUs/KVKs/STL for technical backstopping:***

|  |  |
| --- | --- |
| **Districts** |  |
| Leh & Ladakh |  |
| Gilgit |  |

**Agro-Eco Region 14 :**

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 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*** |
| Tribal Territory | **-** | **-** |  |  |
| Chilas | **-** | **-** |  |  |
| Gilgit Wazarat | **-** | **-** |  |  |
| Muzaffarabad | **-** | **-** |  |  |
| Anantnag | Exclusively water erosion &Waterlogged | **-** |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Tribal Territory |  |
| Chilas |  |
| Gilgit Wazarat |  |
| Muzaffarabad |  |
| Anantnag |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Tribal Territory |  |
| Chilas |  |
| Gilgit Wazarat |  |
| Muzaffarabad |  |
| Anantnag |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Tribal Territory |  |  |
| Chilas |  |  |
| Gilgit Wazarat |  |  |
| Muzaffarabad |  |  |
| Anantnag |  |  |

**Important Links :**

*District Soil nutrient status:*

*District Contingency Plan:*

*District Irrigation Plan:*

*District ground water status:*

*District Vulnerability status:*

***Relevant Research Institutes/SAUs/KVKs/STL for technical backstopping:***

|  |  |
| --- | --- |
| **Districts** |  |
| Tribal Territory |  |
| Chilas |  |
| Gilgit Wazarat |  |
| Muzaffarabad |  |
| Anantnag |  |

**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 | **-** |  |  |
| Punch | **-** | Soil deficient in P |  |  |
| Kathua | **-** | Soil deficient in P & K |  |  |
| Jammu | **-** | Soil deficient in P |  |  |
| Udhampur | Exclusively water erosion | **-** |  |  |
| Muzaffarabad | **-** | **-** |  |  |
| Baramula | **-** | **-** |  |  |
| Riasi | **-** | Soil deficient in P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Anantnag |  |
| Punch |  |
| Kathua |  |
| Jammu |  |
| Udhampur |  |
| Muzaffarabad |  |
| Baramula |  |
| Riasi |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Punch |  |
| Kathua |  |
| Jammu |  |
| Udhampur |  |
| Muzaffarabad |  |
| Baramula |  |
| Riasi |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Anantnag |  |  |
| Punch |  |  |
| Kathua |  |  |
| Jammu |  |  |
| Udhampur |  |  |
| Muzaffarabad |  |  |
| Baramula |  |  |
| Riasi |  |  |

**Important Links :**

*District Soil nutrient status:*

*District Contingency Plan:*

*District Irrigation Plan:*

*District ground water status:*

*District Vulnerability status:*

***Relevant Research Institutes/SAUs/KVKs/STL for technical backstopping:***

|  |  |
| --- | --- |
| **Districts** |  |
| Anantnag |  |
| Punch |  |
| Kathua |  |
| Jammu |  |
| Udhampur |  |
| Muzaffarabad |  |
| Baramula |  |
| Riasi |  |

**Jharkhand**

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

**Agro-Eco Region 11 :**

AER 11 in Jharkand comprises of Chatra,Garhwal, Gumla, Hazaribagh, Kodarma ,Latehar,Lohardaga,Palamu,Simdega and Ranchi districts of Eastern Plateau under Agro Ecological Sub Region (AESR) 11.

**AESR 11 :** 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*** |
| Chatra | **-** | Low in OC &Soil deficient in N |  |  |
| Garhwal | **-** |  |  |  |
| Gumla | **-** | Low in OC &Soil deficient in P |  |  |
| Hazaribagh | **-** | Low in OC,Soil deficient in N & P |  |  |
| Kodarma | **-** | Low in OC, Soil deficient in N, P & K |  |  |
| Latehar | **-** | Low in OC,Soil deficient in N & P |  |  |
| Lohardaga | **-** | Low in OC,Soil deficient in N & P |  |  |
| Palamu | **-** | Soil deficient in P & K |  |  |
| Simdega | **-** | Soil deficient in N & P |  |  |
| Ranchi | Exclusively water erosion | Soil deficient in N & P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Chatra |  |
| Garhwal |  |
| Gumla |  |
| Hazaribagh |  |
| Kodarma |  |
| Latehar |  |
| Lohardaga |  |
| Palamu |  |
| Simdega |  |
| Ranchi |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Chatra |  |
| Garhwal |  |
| Gumla |  |
| Hazaribagh |  |
| Kodarma |  |
| Latehar |  |
| Lohardaga |  |
| Palamu |  |
| Simdega |  |
| Ranchi |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Chatra |  |  |
| Garhwal |  |  |
| Gumla |  |  |
| Hazaribagh |  |  |
| Kodarma |  |  |
| Latehar |  |  |
| Lohardaga |  |  |
| Palamu |  |  |
| Simdega |  |  |
| Ranchi |  |  |

**Important Links :**

*District Soil nutrient status:*

*District Contingency Plan:*

*District Irrigation Plan:*

*District ground water status:*

*District Vulnerability status:*

***Relevant Research Institutes/SAUs/KVKs/STL for technical backstopping:***

|  |  |
| --- | --- |
| **Districts** |  |
| Chatra |  |
| Garhwal |  |
| Gumla |  |
| Hazaribagh |  |
| Kodarma |  |
| Latehar |  |
| Lohardaga |  |
| Palamu |  |
| Simdega |  |
| Ranchi |  |

**Agro-Eco Region 12 :**

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.

**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 |  |  |
| Devgarh | Exclusively water erosion | **-** |  |  |
| Dhanbad | Exclusively water erosion | Soil deficient in K |  |  |
| Dumka | Exclusively water erosion | Low in OC, Soil deficient in N, K & P |  |  |
| Giridih | Exclusively water erosion | Low in OC & Soil deficient in P |  |  |
| Jamtara | Exclusively water erosion | Low in OC & Soil deficient in P |  |  |
| Pakur | Waterlogged | Low in OC & Soil deficient in K |  |  |
| Paschim Singhbhumi | Waterlogged | Low in OC & Soil deficient in K |  |  |
| Purbi Singhbhumi | Waterlogged | Soil deficient in N, K & P |  |  |
| Saraikela | Exclusively water erosion | Soil deficient in N & P |  |  |
| Ramgarh | Exclusively water erosion | Soil deficient P |  |  |
| Kunti | Exclusively water erosion | Soil deficient in P |  |  |
| Sahebganj | Exclusively water erosion | Soil deficient in P |  |  |
| Ranchi | Exclusively water erosion | Soil deficient in N |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Bokaro |  |
| Devgarh |  |
| Dhanbad |  |
| Dumka |  |
| Giridih |  |
| Jamtara |  |
| Pakur |  |
| Paschim Singhbhumi |  |
| Purbi Singhbhumi |  |
| Saraikela |  |
| Ramgarh |  |
| Kunti |  |
| Sahebganj |  |
| Ranchi |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Bokaro |  |
| Devgarh |  |
| Dhanbad |  |
| Dumka |  |
| Giridih |  |
| Jamtara |  |
| Pakur |  |
| Paschim Singhbhumi |  |
| Purbi Singhbhumi |  |
| Saraikela |  |
| Ramgarh |  |
| Kunti |  |
| Sahebganj |  |
| Ranchi |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Bokaro |  |  |
| Devgarh |  |  |
| Dhanbad |  |  |
| Dumka |  |  |
| Giridih |  |  |
| Jamtara |  |  |
| Pakur |  |  |
| Paschim Singhbhumi |  |  |
| Purbi Singhbhumi |  |  |
| Saraikela |  |  |
| Ramgarh |  |  |
| Kunti |  |  |
| Sahebganj |  |  |
| Ranchi |  |  |

**Important Links :**

*District Soil nutrient status:*

*District Contingency Plan:*

*District Irrigation Plan:*

*District ground water status:*

*District Vulnerability status:*

***Relevant Research Institutes/SAUs/KVKs/STL for technical backstopping:***

|  |  |
| --- | --- |
| **Districts** |  |
| Bokaro |  |
| Devgarh |  |
| Dhanbad |  |
| Dumka |  |
| Giridih |  |
| Jamtara |  |
| Pakur |  |
| Paschim Singhbhumi |  |
| Purbi Singhbhumi |  |
| Saraikela |  |
| Ramgarh |  |
| Kunti |  |
| Sahebganj |  |
| Ranchi |  |

**Agro-Eco Region 13 :**

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

**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 |  |  |
| Sahebganj | Exclusively water erosion | Soil deficient in P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Gooda |  |
| Sahebganj |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Gooda |  |
| Sahebganj |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Gooda |  |  |
| Sahebganj |  |  |

**Important Links :**

*District Soil nutrient status:*

*District Contingency Plan:*

*District Irrigation Plan:*

*District ground water status:*

*District Vulnerability status:*

***Relevant Research Institutes/SAUs/KVKs/STL for technical backstopping:***

|  |  |
| --- | --- |
| **Districts** |  |
| Gooda |  |
| Sahebganj |  |

**Agro-Eco Region 15 :**

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

**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 |  |  |
| Sahebganj | - | Soil deficient in P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Pakur |  |
| Sahebganj |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Pakur |  |
| Sahebganj |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Pakur |  |  |
| Sahebganj |  |  |

**Important Links :**

*District Soil nutrient status:*

*District Contingency Plan:*

*District Irrigation Plan:*

*District ground water status:*

*District Vulnerability status:*

***Relevant Research Institutes/SAUs/KVKs/STL for technical backstopping:***

|  |  |
| --- | --- |
| **Districts** |  |
| Pakur |  |
| Sahebganj |  |