**Madhya Pradesh**

Madhya Pradesh comprises of three Agro Ecological Regions (AER) 4,5 & 10.

**Agro-Eco Region 4:**

AER 4 in Madhya Pradesh comprises of Bhind, Gwalior, Morena, Sheopur, Shivpri and Datia districts of Northern Plain and Central Highlands including Aravallis under Agro Ecological Sub Regions (AESR) 4.3 & 4.4.

**AESR 4.3 :** The region is hot moist semi-arid ESR with deep, loamy alluvium-derived soils (sodic phase inclusion), medium to high AWC and LGP 120-150 day in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Bhind | **-** | Low in OC , Soil deficient in N & P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Bhind |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Bhind |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Bhind |  |  |

**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** |  |
| Bhind |  |

**AESR 4.4 :** The region is hot, moist semi-arid ESR with Deep loamy and clayey mixed Red and Black soils, medium to high AWC and LGP 90-120 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Gwalior | Exclusively water erosion | Soil deficient in N |  |  |
| Morena | Exclusively water erosion | Low in OC & Soil deficient in N |  |  |
| Sheopur | Exclusively water erosion | Soil deficient in N & P |  |  |
| Shivpri | Exclusively water erosion | Soil deficient in N |  |  |
| Datia | Exclusively water erosion | Soil deficient in N |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Gwalior |  |
| Morena |  |
| Sheopur |  |
| Shivpri |  |
| Datia |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Gwalior |  |
| Morena |  |
| Sheopur |  |
| Shivpri |  |
| Datia |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Gwalior |  |  |
| Morena |  |  |
| Sheopur |  |  |
| Shivpri |  |  |
| Datia |  |  |

**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** |  |
| Gwalior |  |
| Morena |  |
| Sheopur |  |
| Shivpri |  |
| Datia |  |

**Agro-Eco Region 5:**

AER 5 in Madhya Pradesh comprises of Shajapur,Alirajpur,Barwani,Burhanpur,Dewas,Dhar, East Nimar, Indore, Jhabua, Mandsaur, Nimach, Ratlam, Ujjan and West Nirman districts of Central (Malwa) Highlands under Agro Ecological Sub Region (AESR) 5.2.

**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*** |
| Shajapur | Exclusively water erosion | Soil deficient in N |  |  |
| Alirajpur | Exclusively water erosion | Soil deficient in N & P |  |  |
| Barwani | Exclusively water erosion | Soil deficient in N & P |  |  |
| Burhanpur | Exclusively water erosion | Soil deficient in N & P |  |  |
| Dewas | Exclusively water erosion | Soil deficient in N & P |  |  |
| Dhar | Exclusively water erosion | Soil deficient in N & P |  |  |
| East Nimar | Exclusively water erosion | Soil deficient in N & P |  |  |
| Indore | Exclusively water erosion | Low in OC, Soil deficient in N & P |  |  |
| Jhabua | Exclusively water erosion | Soil deficient in N & P |  |  |
| Mandsaur | Exclusively water erosion | Soil deficient in N & P |  |  |
| Nimach | Exclusively water erosion | Soil deficient in N & P |  |  |
| Ratlam | Exclusively water erosion | Low in OC, Soil deficient in N & P |  |  |
| Ujjan | - | Soil deficient in N |  |  |
| West Nirman | Exclusively water erosion | Soil deficient in N & P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Shajapur |  |
| Alirajpur |  |
| Barwani |  |
| Burhanpur |  |
| Dewas |  |
| Dhar |  |
| East Nimar |  |
| Indore |  |
| Jhabua |  |
| Mandsaur |  |
| Nimach |  |
| Ratlam |  |
| Ujjan |  |
| West Nirman |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Shajapur |  |
| Alirajpur |  |
| Barwani |  |
| Burhanpur |  |
| Dewas |  |
| Dhar |  |
| East Nimar |  |
| Indore |  |
| Jhabua |  |
| Mandsaur |  |
| Nimach |  |
| Ratlam |  |
| Ujjan |  |
| West Nirman |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Shajapur |  |  |
| Alirajpur |  |  |
| Barwani |  |  |
| Burhanpur |  |  |
| Dewas |  |  |
| Dhar |  |  |
| East Nimar |  |  |
| Indore |  |  |
| Jhabua |  |  |
| Mandsaur |  |  |
| Nimach |  |  |
| Ratlam |  |  |
| Ujjan |  |  |
| West Nirman |  |  |

**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** |  |
| Shajapur |  |
| Alirajpur |  |
| Barwani |  |
| Burhanpur |  |
| Dewas |  |
| Dhar |  |
| East Nimar |  |
| Indore |  |
| Jhabua |  |
| Mandsaur |  |
| Nimach |  |
| Ratlam |  |
| Ujjan |  |
| West Nirman |  |

**Agro-Eco Region 10:**

AER 10 in Madhya Pradesh comprises of districts Ashoknagar,Bhopal,Damoh,Guna,Harda,Hoshangabad, Jabalpur, Katni, Narshimapura, Raisen, Rajgarh, Sagar, Sehore, Shajapur, Videsha, Dewas, Betul, Anuppur, Chhatarpur, Panna, Rewa, Satna, Shahdol, Sidhi, Singrauli, Tikamgarh, Umaria, Balaghat, Chhindwara, Dindori, Jabalpur, Mandla and Seoni of Central Highlands under Agro Ecological Sub Regions (AESR) 10.1, 10.2 ,10.3& 10.4.

**AESR 10.1:** The region is hot dry semi-arid ESR with shallow and medium loamy Black soils (deep clayey Black soils as inclusion), medium to high AWC and LGP 90-120 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Ashoknagar | Exclusively water erosion | Soil deficient in N & P |  |  |
| Bhopal | Exclusively water erosion | Soil deficient in N & P |  |  |
| Damoh | - | Soil deficient in P |  |  |
| Guna | Exclusively water erosion | Soil deficient in N & P |  |  |
| Harda | Exclusively water erosion | Soil deficient in N |  |  |
| Hoshangabad | Exclusively water erosion | Low in OC & Soil deficient in N |  |  |
| Jabalpur | Exclusively water erosion | Soil deficient in N & P |  |  |
| Katni | Exclusively water erosion | Soil deficient in N |  |  |
| Narshimapura | Exclusively water erosion | Soil deficient in N & P |  |  |
| Raisen | Exclusively water erosion | Soil deficient in N & P |  |  |
| Rajgarh | Exclusively water erosion | Low in OC, Soil deficient in N & P |  |  |
| Sagar | Exclusively water erosion | Soil deficient in P |  |  |
| Sehore | Exclusively water erosion | Soil deficient in N & P |  |  |
| Shajapur | Exclusively water erosion | Soil deficient in N |  |  |
| Videsha | Exclusively water erosion | Soil deficient in N & P |  |  |
| Dewas | Exclusively water erosion | Soil deficient in N & P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Ashoknagar |  |
| Bhopal |  |
| Damoh |  |
| Guna |  |
| Harda |  |
| Hoshangabad |  |
| Jabalpur |  |
| Katni |  |
| Narshimapura |  |
| Raisen |  |
| Rajgarh |  |
| Sagar |  |
| Sehore |  |
| Shajapur |  |
| Videsha |  |
| Dewas |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Ashoknagar |  |
| Bhopal |  |
| Damoh |  |
| Guna |  |
| Harda |  |
| Hoshangabad |  |
| Jabalpur |  |
| Katni |  |
| Narshimapura |  |
| Raisen |  |
| Rajgarh |  |
| Sagar |  |
| Sehore |  |
| Shajapur |  |
| Videsha |  |
| Dewas |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Ashoknagar |  |  |
| Bhopal |  |  |
| Damoh |  |  |
| Guna |  |  |
| Harda |  |  |
| Hoshangabad |  |  |
| Jabalpur |  |  |
| Katni |  |  |
| Narshimapura |  |  |
| Raisen |  |  |
| Rajgarh |  |  |
| Sagar |  |  |
| Sehore |  |  |
| Shajapur |  |  |
| Videsha |  |  |
| Dewas |  |  |

**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** |  |
| Ashoknagar |  |
| Bhopal |  |
| Damoh |  |
| Guna |  |
| Harda |  |
| Hoshangabad |  |
| Jabalpur |  |
| Katni |  |
| Narshimapura |  |
| Raisen |  |
| Rajgarh |  |
| Sagar |  |
| Sehore |  |
| Shajapur |  |
| Videsha |  |
| Dewas |  |

**AESR 10.2:** The region is hot dry subhumid ESR with shallow and medium loamy to clayey Black soils (deep clayey Black soils as inclusion), medium to high AWC and LGP 150-180 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Betul | **-** | Low in OC, Soil deficient in N & P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Betul |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Betul |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Betul |  |  |

**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** |  |
| Betul |  |

**AESR 10.3:** The region hot dry subhumid ESR with deep loamy to clayey mixed Red and Black soils, medium to high AWC and LGP 150-180 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Anuppur | Exclusively water erosion | Soil deficient in N |  |  |
| Chhatarpur | Exclusively water erosion | Low in OC & Soil deficient in N |  |  |
| Panna | Exclusively water erosion | Soil deficient in N & P |  |  |
| Rewa | Exclusively water erosion | Soil deficient in N & P |  |  |
| Satna | Exclusively water erosion | Soil deficient in N |  |  |
| Shahdol | Exclusively water erosion | Soil deficient in N & P |  |  |
| Sidhi | Exclusively water erosion | **-** |  |  |
| Singrauli | Exclusively water erosion | Low in OC & Soil deficient in N |  |  |
| Tikamgarh | Exclusively water erosion | **-** |  |  |
| Umaria | - | Soil deficient in N & P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Anuppur |  |
| Chhatarpur |  |
| Panna |  |
| Rewa |  |
| Satna |  |
| Shahdol |  |
| Sidhi |  |
| Singrauli |  |
| Tikamgarh |  |
| Umaria |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Anuppur |  |
| Chhatarpur |  |
| Panna |  |
| Rewa |  |
| Satna |  |
| Shahdol |  |
| Sidhi |  |
| Singrauli |  |
| Tikamgarh |  |
| Umaria |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Anuppur |  |  |
| Chhatarpur |  |  |
| Panna |  |  |
| Rewa |  |  |
| Satna |  |  |
| Shahdol |  |  |
| Sidhi |  |  |
| Singrauli |  |  |
| Tikamgarh |  |  |
| Umaria |  |  |

**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** |  |
| Anuppur |  |
| Chhatarpur |  |
| Panna |  |
| Rewa |  |
| Satna |  |
| Shahdol |  |
| Sidhi |  |
| Singrauli |  |
| Tikamgarh |  |
| Umaria |  |

**AESR 10.4:**The region is hot moist subhumid ESR with shallow to deep loamy to clayey mixed Red and Black 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*** |
| Balaghat | **-** | **-** |  |  |
| Chhindwara | Exclusively water erosion | Soil deficient in N & P |  |  |
| Dindori | Exclusively water erosion | Soil deficient in P |  |  |
| Jabalpur | Exclusively water erosion | Soil deficient in N & P |  |  |
| Mandla | Exclusively water erosion | Soil deficient in N & P |  |  |
| Seoni | Exclusively water erosion | Soil deficient in N & P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Balaghat |  |
| Chhindwara |  |
| Dindori |  |
| Jabalpur |  |
| Mandla |  |
| Seoni |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Balaghat |  |
| Chhindwara |  |
| Dindori |  |
| Jabalpur |  |
| Mandla |  |
| Seoni |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Balaghat |  |  |
| Chhindwara |  |  |
| Dindori |  |  |
| Jabalpur |  |  |
| Mandla |  |  |
| Seoni |  |  |

**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** |  |
| Balaghat |  |
| Chhindwara |  |
| Dindori |  |
| Jabalpur |  |
| Mandla |  |
| Seoni |  |

**Maharashtra**

**Agro-Eco Region 5:** AER 5 in Maharashtra comprises of one Nandurbar district of Central (Malwa) Highlands under Agro Ecological Sub Region (AESR) 5.2.

**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*** |
| Nandurbar | **-** | Soil deficient in N & P |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Nandurbar |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Nandurbar |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Nandurbar |  |  |

**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** |  |
| Nandurbar |  |

**Agro-Eco Region 6:** AER 6 in Maharashtra comprises of Ahmadnagar , Bid , Osmanabad , Pune, Sangli , Satara, Solapur, Ahmadnagar, Aurangabad, Dhule, Hingoli, Jalgaon, Jalna, Latur, Nanded, Nandurbar , Parbhani, Akola , Amaravati , Buldhana , Jalgaon , Nasik , Washim , Yavatmal , Kolhapur , Pune , Sangli and Satara districts of Deccan Plateau under Agro Ecological Sub Regions (AESR) 6.1,6.2,6.3 & 6.4.

**AESR 6.1 :** The region is hot dry semi-arid ESR with shallow and medium loamy Black soils (deep clayey Black soils as inclusion), medium to high AWC and LGP 90-120 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Ahmadnagar | Exclusively water erosion | Soil deficient in N |  |  |
| Bid | **-** | Low In OC & Soil deficient in N |  |  |
| Osmanabad | **-** | Low In OC & Soil deficient in N |  |  |
| Pune | Exclusively water erosion | Soil deficient in N |  |  |
| Sangli | Exclusively water erosion | Low In OC , Soil deficient in N & P |  |  |
| Satara | **-** | **-** |  |  |
| Solapur | **-** | Soil deficient in N |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Ahmadnagar |  |
| Bid |  |
| Osmanabad |  |
| Pune |  |
| Sangli |  |
| Satara |  |
| Solapur |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Ahmadnagar |  |
| Bid |  |
| Osmanabad |  |
| Pune |  |
| Sangli |  |
| Satara |  |
| Solapur |  |
|  |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Ahmadnagar |  |  |
| Bid |  |  |
| Osmanabad |  |  |
| Pune |  |  |
| Sangli |  |  |
| Satara |  |  |
| Solapur |  |  |

**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** |  |
| Ahmadnagar |  |
| Bid |  |
| Osmanabad |  |
| Pune |  |
| Sangli |  |
| Satara |  |
| Solapur |  |

**AESR 6.2 :** The region is 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*** |
| Aurangabad | **-** |  |  |  |
| Dhule | Exclusively water erosion | Low in OC & Soil deficient in N |  |  |
| Hingoli | **-** | **-** |  |  |
| Jalgaon | **-** | Low in OC & Soil deficient in N |  |  |
| Jalna | **-** |  |  |  |
| Latur | **-** | Soil deficient in N |  |  |
| Nanded | **-** | Soil deficient in N |  |  |
| Nandurbar | **-** | Low in OC & Soil deficient in N |  |  |
| Parbhani | **-** | Low in OC & Soil deficient in N |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Aurangabad |  |
| Dhule |  |
| Hingoli |  |
| Jalgaon |  |
| Jalna |  |
| Latur |  |
| Nanded |  |
| Nandurbar |  |
| Parbhani |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Aurangabad |  |
| Dhule |  |
| Hingoli |  |
| Jalgaon |  |
| Jalna |  |
| Latur |  |
| Nanded |  |
| Nandurbar |  |
| Parbhani |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Aurangabad |  |  |
| Dhule |  |  |
| Hingoli |  |  |
| Jalgaon |  |  |
| Jalna |  |  |
| Latur |  |  |
| Nanded |  |  |
| Nandurbar |  |  |
| Parbhani |  |  |

**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** |  |
| Aurangabad |  |
| Dhule |  |
| Hingoli |  |
| Jalgaon |  |
| Jalna |  |
| Latur |  |
| Nanded |  |
| Nandurbar |  |
| Parbhani |  |

**AESR 6.3 :** The region is hot moist semi-arid ESR with medium land deep clayey Black soils (shallow loamy to 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*** |
| Akola | **-** | Low in OC & Soil deficient in N |  |  |
| Amaravati | **-** | Low in OC & Soil deficient in N |  |  |
| Buldhana | **-** | Soil deficient in N |  |  |
| Jalgaon | **-** | Low in OC & Soil deficient in N |  |  |
| Nasik | Exclusively water erosion | Soil deficient in N |  |  |
| Washim | **-** | Low in OC |  |  |
| Yavatmal | **-** | Low in OC & Soil deficient in N |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Akola |  |
| Amaravati |  |
| Buldhana |  |
| Jalgaon |  |
| Nasik |  |
| Washim |  |
| Yavatmal |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Akola |  |
| Amaravati |  |
| Buldhana |  |
| Jalgaon |  |
| Nasik |  |
| Washim |  |
| Yavatmal |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Akola |  |  |
| Amaravati |  |  |
| Buldhana |  |  |
| Jalgaon |  |  |
| Nasik |  |  |
| Washim |  |  |
| Yavatmal |  |  |

**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** |  |
| Akola |  |
| Amaravati |  |
| Buldhana |  |
| Jalgaon |  |
| Nasik |  |
| Washim |  |
| Yavatmal |  |

**AESR 6.4 :** The region hot dry subhumid ESR.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Kolhapur | **-** |  |  |  |
| Pune | Exclusively water erosion |  |  |  |
| Sangli | Exclusively water erosion |  |  |  |
| Satara | **-** |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Kolhapur |  |
| Pune |  |
| Sangli |  |
| Satara |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Kolhapur |  |
| Pune |  |
| Sangli |  |
| Satara |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Kolhapur |  |  |
| Pune |  |  |
| Sangli |  |  |
| Satara |  |  |

**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** |  |
| Kolhapur |  |
| Pune |  |
| Sangli |  |
| Satara |  |

**Agro-Eco Region 10:** AER 10 in Maharashtra comprises of Wardha,Nagpur,Amaravati,Bhandara and Gondiya districts of Central Highlands under Agro Ecological Sub Regions (AESR) 10.2 & 10.4.

**AESR 10.2 :** The region is hot dry subhumid ESR with shallow and medium loamy to clayey Black soils (deep clayey Black soils as inclusion), medium to high AWC and LGP 150-180 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Amaravati | **-** |  |  |  |
| Nagpur | **-** |  |  |  |
| Wardha | **-** |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Amaravati |  |
| Nagpur |  |
| Wardha |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Amaravati |  |
| Nagpur |  |
| Wardha |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Amaravati |  |  |
| Nagpur |  |  |
| Wardha |  |  |

**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** |  |
| Amaravati |  |
| Nagpur |  |
| Wardha |  |

**AESR 10.4 :** The region is hot moist subhumid ESR with shallow to deep loamy to clayey mixed Red and Black 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*** |
| Bhandara | **-** |  |  |  |
| Gondiya | **-** |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Bhandara |  |
| Gondiya |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Bhandara |  |
| Gondiya |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Bhandara |  |  |
| Gondiya |  |  |

**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** |  |
| Bhandara |  |
| Gondiya |  |

**Agro-Eco Region 12:** AER 12 in Maharashtra comprises of Chandrapur and Gadchiroli districts of Eastern (Chhotanagpnr) Plateau under Agro Ecological Sub Region (AESR) 12.1.

**AESR 12.1 :** The region is hot moist subhumid ESR with deep loamy Red and Lateritic 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*** |
| Chandrapur | **-** |  |  |  |
| Gadchiroli | **-** |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Chandrapur |  |
| Gadchiroli |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Chandrapur |  |
| Gadchiroli |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Chandrapur |  |  |
| Gadchiroli |  |  |

**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** |  |
| Chandrapur |  |
| Gadchiroli |  |

**Agro-Eco Region 19:** AER 19 in Maharashtra comprises of Raigarh, Ratnagiri,Sindhudurg,Kolhapur,Raigarh,Ratnagiri,Sindhudurg , Suburban Mumbai, Thane and Mumbai City districts Thane of Western Ghats & Coastal Plain under Agro Ecological Sub Regions (AESR) 19.1,19.2 & 19.3.

**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.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Raigarh | Exclusively water erosion |  |  |  |
| Thane | Exclusively water erosion & Waterlogged |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Raigarh |  |
| Thane |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Raigarh |  |
| Thane |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Raigarh |  |  |
| Thane |  |  |

**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** |  |
| Raigarh |  |
| Thane |  |

**AESR 19.2 :** 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.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Ratnagiri | Exclusively water erosion |  |  |  |
| Sindhudurg | Exclusively water erosion |  |  |  |
| Kolhapur | **-** |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Ratnagiri |  |
| Sindhudurg |  |
| Kolhapur |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Ratnagiri |  |
| Sindhudurg |  |
| Kolhapur |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Ratnagiri |  |  |
| Sindhudurg |  |  |
| Kolhapur |  |  |

**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** |  |
| Ratnagiri |  |
| Sindhudurg |  |
| Kolhapur |  |

**AESR 19.3 :** The region is 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*** |
| Raigarh | Exclusively water erosion |  |  |  |
| Ratnagiri | Exclusively water erosion |  |  |  |
| Sindhudurg | Exclusively water erosion |  |  |  |
| Suburban Mumbai | Exclusively water erosion |  |  |  |
| Thane | Exclusively water erosion & Waterlogged |  |  |  |
| Mumbai City | Exclusively water erosion & Waterlogged |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Raigarh |  |
| Ratnagiri |  |
| Sindhudurg |  |
| Suburban Mumbai |  |
| Thane |  |
| Mumbai City |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Raigarh |  |
| Ratnagiri |  |
| Sindhudurg |  |
| Suburban Mumbai |  |
| Thane |  |
| Mumbai City |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Raigarh |  |  |
| Ratnagiri |  |  |
| Sindhudurg |  |  |
| Suburban Mumbai |  |  |
| Thane |  |  |
| Mumbai City |  |  |

**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** |  |
| Raigarh |  |
| Ratnagiri |  |
| Sindhudurg |  |
| Suburban Mumbai |  |
| Thane |  |
| Mumbai City |  |

**Manipur**

Manipur comprises of one Agro Ecological Region (AER) 17.

**Agro-Eco Region 17:**

AER 17 in Manipur comprises of Bishnupur, Chandel, Churachandpur, Senapati, Tamenglong, Thoubal, Ukhrul, Imphal West and Imphal East districts of Northern Plain and Central Highlands including Aravallis under Agro Ecological Sub Regions (AESR) 4.3 & 4.4.

**AESR 17.2 :** The region is warm to hot perhumid ESR with medium to deep loamy Red and Yellow soils, low to medium AWC and LGP 300 days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Bishnupur | Waterlogged |  |  |  |
| Chandel | Acid soils under open forest |  |  |  |
| Churachandpur | Acid soils under open forest |  |  |  |
| Senapati | Acid soils under open forest & Waterlogged |  |  |  |
| Tamenglong | Acid soils under open forest |  |  |  |
| Thoubal | **-** |  |  |  |
| Ukhrul | Acid soils under open forest |  |  |  |
| Imphal West | Exclusively acid soils |  |  |  |
| Imphal East | Acid soils under water erosion |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Bishnupur |  |
| Chandel |  |
| Churachandpur |  |
| Senapati |  |
| Tamenglong |  |
| Thoubal |  |
| Ukhrul |  |
| Imphal West |  |
| Imphal East |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Bishnupur |  |
| Chandel |  |
| Churachandpur |  |
| Senapati |  |
| Tamenglong |  |
| Thoubal |  |
| Ukhrul |  |
| Imphal West |  |
| Imphal East |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Bishnupur |  |  |
| Chandel |  |  |
| Churachandpur |  |  |
| Senapati |  |  |
| Tamenglong |  |  |
| Thoubal |  |  |
| Ukhrul |  |  |
| Imphal West |  |  |
| Imphal East |  |  |

**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** |  |
| Bishnupur |  |
| Chandel |  |
| Churachandpur |  |
| Senapati |  |
| Tamenglong |  |
| Thoubal |  |
| Ukhrul |  |
| Imphal West |  |
| Imphal East |  |

**Meghalaya**

Meghalaya comprises of one Agro Ecological Region (AER) 17.

**Agro-Eco Region 17:**

AER 17 in Meghalaya comprises of East Garo Hills, East Khasi Hills, Jaintia Hills, West Khasi Hills, Ri Bhoi and South Garo Hills districts of North-eastern Hills under Agro Ecological Sub Region (AESR) 17.1.

**AESR 17.1 :** The region is warm to hot moist humid to perhumid ESR with medium to deep loamy to clayey Red and Lateritic soils, medium AWC and LGP 270-300+ days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| East Garo Hills | Water erosion under open forest & Waterlogged |  |  |  |
| East Khasi Hills | Acid soils under open forest |  |  |  |
| Jaintia Hills | Acid soils under open forest |  |  |  |
| West Khasi Hills | Acid soils under open forest |  |  |  |
| Ri Bhoi | Acid soils under open forest |  |  |  |
| South Garo Hills | Water erosion under open forest |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| East Garo Hills |  |
| East Khasi Hills |  |
| Jaintia Hills |  |
| West Khasi Hills |  |
| Ri Bhoi |  |
| South Garo Hills |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| East Garo Hills |  |
| East Khasi Hills |  |
| Jaintia Hills |  |
| West Khasi Hills |  |
| Ri Bhoi |  |
| South Garo Hills |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| East Garo Hills |  |  |
| East Khasi Hills |  |  |
| Jaintia Hills |  |  |
| West Khasi Hills |  |  |
| Ri Bhoi |  |  |
| South Garo Hills |  |  |

**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** |  |
| East Garo Hills |  |
| East Khasi Hills |  |
| Jaintia Hills |  |
| West Khasi Hills |  |
| Ri Bhoi |  |
| South Garo Hills |  |

**Mizoram**

Mizoram comprises of one Agro Ecological Region (AER) 17.

**Agro-Eco Region 17:**

AER 17 in Mizoram comprises of Aizawal,Lawngtali,Lunglei,Kolasib,Mamit,Champhai,Serchhip and Saiha districts of North-eastern Hills under Agro Ecological Sub Region (AESR) 17.1.

**AESR 17.1 :** The region is warm to hot moist humid to perhumid ESR with medium to deep loamy to clayey Red and Lateritic soils, medium AWC and LGP 270-300+ days in a year.

**Major NRM issues :**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Aizawal | Acid soils under open forest |  |  |  |
| Lawngtali | Acid soils under open forest |  |  |  |
| Lunglei | Acid soils under open forest |  |  |  |
| Kolasib | **-** |  |  |  |
| Mamit | **-** |  |  |  |
| Champhai | Acid soils under open forest |  |  |  |
| Serchhip | Acid soils under open forest |  |  |  |
| Saiha | Acid soils under open forest |  |  |  |

**Major technological Interventions:**

|  |  |
| --- | --- |
| **Districts** | **Major technological Interventions** |
| Aizawal |  |
| Lawngtali |  |
| Lunglei |  |
| Kolasib |  |
| Mamit |  |
| Champhai |  |
| Serchhip |  |
| Saiha |  |

**Relevant Developmental Schemes:**

|  |  |
| --- | --- |
| **Districts** | **Relevant Developmental Schemes** |
| Aizawal |  |
| Lawngtali |  |
| Lunglei |  |
| Kolasib |  |
| Mamit |  |
| Champhai |  |
| Serchhip |  |
| Saiha |  |

**Crop Planning/Farming System:**

|  |  |  |
| --- | --- | --- |
| **Districts** | **Existing Cropping/farming system** | **Alternate Cropping/farming system** |
| Aizawal |  |  |
| Lawngtali |  |  |
| Lunglei |  |  |
| Kolasib |  |  |
| Mamit |  |  |
| Champhai |  |  |
| Serchhip |  |  |
| Saiha |  |  |

**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** |  |
| Aizawal |  |
| Lawngtali |  |
| Lunglei |  |
| Kolasib |  |
| Mamit |  |
| Champhai |  |
| Serchhip |  |
| Saiha |  |