**Uttarakhand**

Uttarakhand comprises of two Agro Ecological Regions (AER) 9 & 14.

**Agro-Eco Region 9:** AER 9 in Uttarakhand comprises of Haridwar and Udham Singh Nagar districts of Eastern Ghats under Agro Ecological Sub Regions (AESR) 9.1 & 9.2.

**Agro-Eco Region 14:**AER 14 in Uttarakhand comprises of Almora, Bageshwar, Chamoli, Champawat, Dehradun, Nanital, Pithoragarh, Purbi Garhwal, Rudraprayag, Tehri Garwal and Uttarkashi districts of Western Himalayas under Agro Ecological Sub Regions (AESR) 14.2,14.4 & 14.5.

**Major NRM issues :**

**AESR 9.1:** The region is hot semi-arid ESR with deep loamy alluvium-derived soils (occasional saline and sodic phases), 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*** |
| Haridwar | Exclusively water erosion | Soil deficient in N | GW Contaminated with NO3 & Fe |  |

**AESR 9.2:** The region hot dry subhumid ESR with deep loamy alluvium-derived soils, medium to high AWC and LGP 150-180 days in a year.

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| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Udham Singh Nagar | Exclusively water erosion & Waterlogged | Low in OC & Soil deficient in N | GW Contaminated with NO3 & Fe |  |

**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.

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| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Almora | **-** | Soil deficient in N & P | GW Contaminated with NO3 |  |
| Bageshwar | **-** | **-** | - |  |
| Chamoli | **Waterlogged** | Soil deficient in N | - |  |
| Champawat | **-** | Soil deficient in N | - |  |
| Dehradun | Exclusively water erosion | **-** | GW Contaminated with NO3 & Fe |  |
| Pithoragarh | **-** | Soil deficient in N | - |  |
| Rudraprayag | **-** | Soil deficient in N | - |  |
| Tehri Garwal | **-** | Soil deficient in N | - |  |
| Uttarkashi | **-** | Soil deficient in N | - |  |

**AESR 14.4:** The region is humid to perhumid transitional ESR with shallow to medium deep loamy Red and Yellow soils, low AWC and LGP 270-300+ days in a year.

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| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Dehradun | Exclusively water erosion | **-** | GW Contaminated with NO3 & Fe |  |
| Uttarkashi | **-** | Soil deficient in N | GW Contaminated with Fe |  |

**AESR 14.5:** The region is warm moist subhumid ESR with medium to deep, loamy arai soils, medium AWC and LGP 270-300 days in a year.

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| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Almora | **-** | Soil deficient in N & P |  |  |
| Nanital | Waterlogged | Soil deficient in N & P |  |  |
| Purbi Garhwal | - | Soil deficient in N |  |  |