**Kerala**

Kerala comprises of one Agro Ecological Region (AER) namely 19.

**Agro-Eco Region 19:** AER 19 in Kerala comprises of Alappuzha, Ernakulam, Idukki, Kannur, Kasargod, Kollam, Kottyam, Kozikod, Malappuram, Palakkad, Pattanamittia, Thiruvananthpuram, Trishur and Wayanad districts of Western Ghats & Coastal Plain under Agro Ecological Sub Regions (AESR) 19.2 & 19.3.

**Major NRM issues :**

**AESR 19.2:** The region is 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*** |
| Ernakulam | Exclusively acid soils & Waterlogged | Soil deficient in N | Saline GW Contaminated with F, Fe & heavy metals | Moderately prone to flood & drought |
| Idukki | Exclusively acid soils | Soil deficient in N & P | GW Contaminated with F, NO3 & Fe | Moderately prone to flood & drought |
| Kannur | Exclusively acid soils | Soil deficient in N | GW Contaminated with Fe | **-** |
| Kollam | Exclusively water erosion, Exclusively acid soils & Acid soils under open forest | Soil deficient in N | Saline GW Contaminated with Fe, NO3 & heavy metals | Moderately prone to flood & drought |
| Kottyam | Exclusively acid soils & Waterlogged | Soil deficient in N & P | Saline GW Contaminated with NO3 & Fe | **-** |
| Kozikod | Exclusively acid soils, Acid soils under water erosion & Acid soils under open forest | Soil deficient in N | GW Contaminated with NO3 & Fe | **-** |
| Malappuram | Exclusively acid soils & Waterlogged | Soil deficient in N & P | GW Contaminated with NO3 & Fe | **-** |
| Palakkad | Exclusively acid soils | Soil deficient in N & B | GW Contaminated with NO3 & Fe | **-** |
| Pattanamittia | Waterlogged | Soil deficient in N, B & S | GW Contaminated with NO3 & Fe | **-** |
| Thiruvananthpuram | Exclusively acid soils | Soil deficient in N |  | **-** |
| Trishur | Exclusively acid soils & Waterlogged | Soil deficient in N, B & S | GW Contaminated with NO3 & Fe | **-** |
| Wayanad | Exclusively acid soils | Soil deficient in N, B & S | GW Contaminated with NO3 & Fe | **-** |

**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.

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| **Districts** | ***Land degradation*** | ***Soil health & fertility*** | ***Water related constraints*** | ***Environmental constraints*** |
| Alappuzha | Exclusively acid soils & Acid Saline Soil | Soil deficient in N & K | GW Contaminated with F, NO3 & Fe | **-** |
| Ernakulam | Exclusively acid soils, Acid soils under water erosion & Waterlogged | Soil deficient in N | Saline GW Contaminated with F, Fe & heavy metals | Moderately prone to flood & drought |
| Kannur | Exclusively acid soils | Soil deficient in N | GW Contaminated with Fe | **-** |
| Kasargod | Exclusively acid soils & Acid soils under water erosion | Soil deficient in N , P & K | GW Contaminated with Fe | **-** |
| Kollam | Exclusively water erosion, Exclusively acid soils & Acid soils under open forest | Soil deficient in N | Saline GW Contaminated with Fe, NO3 & heavy metals | Moderately prone to flood & drought |
| Kozikod | Exclusively acid soils, Acid soils under water erosion & Acid soils under open forest | Soil deficient in N | GW Contaminated with NO3 & Fe | **-** |
| Malappuram | Exclusively acid soils | Soil deficient in N | GW Contaminated with NO3 & Fe | **-** |
| Thiruvananthpuram | Exclusively acid soils | Soil deficient in N | Saline GW Contaminated with F, Fe & NO3 | **-** |
| Trishur | Exclusively acid soils & Acid soils under water erosion | Soil deficient in N | GW Contaminated with NO3 & Fe | **-** |