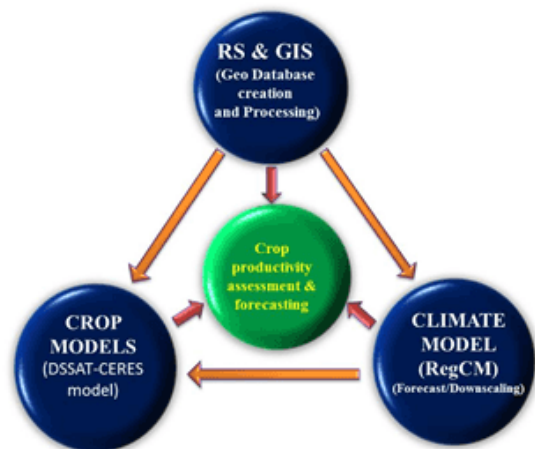
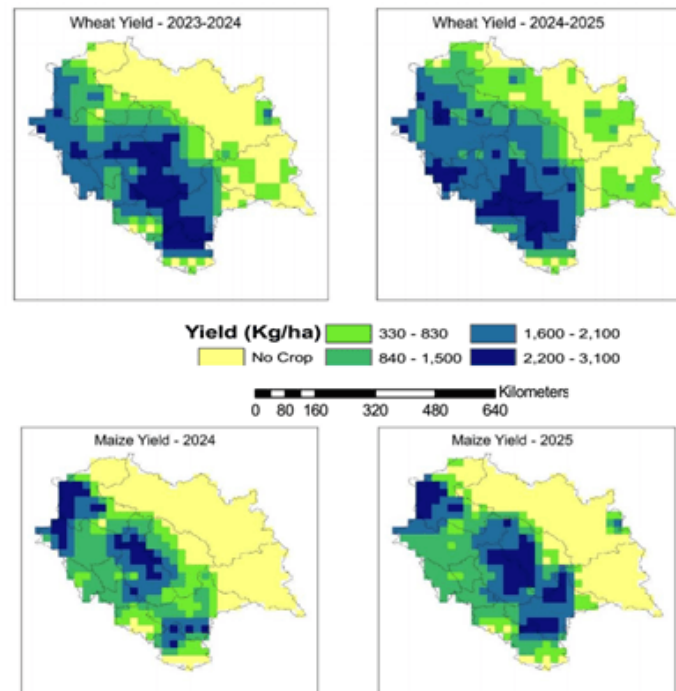
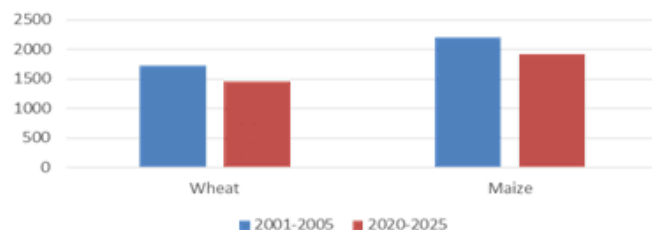


Climate change impact on productivity of food grain crops (Himachal Pradesh)



Yield change between 2001-2005 and 2021-2025 for wheat and maize



- Down-scaling of GCM (ECHAM) model by RegCM 4.0 captured inter-annual variability of climatic parameters (2001-2025) and has shown reasonably good agreement for rainfall and temperature simulation with CRU data
- Simulation for wheat and maize yield using CERES-WHEAT and CERES-MAIZE in Himachal Pradesh had reasonably good agreement with observed yield at district level. Overall agreement index for simulated maize and wheat yield is 0.67 and 0.72, respectively.
- In near future (2021-2025), climate change is appeared to marginally reduced crop yield of Maize (13%) and Wheat (15.7%) compared to 2001-2005.