CLIMATE RESILIENT TOOL FOR ENHANCING AGRICULTURAL RESILIENCE IN INDIA

SMS-based weather-agro advisories for farmers

Photo credit: Gorakhpur Environmental Action Group (GEAG)

The small and marginal farmers in the state of Uttar Pradesh whose livelihoods depend completely on agriculture and allied, till their small piece of land for survival, but are often caught unaware and unprepared when hit by such unforeseen weather vagaries in this era of climate change. When all they need to fight this is some timely information on the weather and how it would affect their crops.

To address this, a mechanism is needed to integrate weather forecast and climatic and agro-meteorological information that prepares an agro weather advisory customised for the farmer. Gorakhpur Environmental Action Group (GEAG) has been doing just that by providing location specific (village cluster level) agro-weather advisories to the farmers in the local language, Hindi.

They describe the prevailing weather and suggest appropriate measures to minimize losses, optimize input through irrigation, fertilizer, pesticides, etc.

Around 8,000 farmers are accessing weather–agro-advisories in the state of Uttar Pradesh - India

Not only do they serve as an early warning system but also alert local communities on the implications of the expected weather events on their farming choices. To keep a track on the usefulness and accuracy of these advisories, feedback collected from the farmers on a regular basis is collated and recorded every month.

The sourcing of information here is at micro level, hence forecast accuracy is much higher in comparison to other such projections. Further, a span of five days is small, which again enhances quality and accuracy of information. Forecasts obtained through other means such as television, newspaper or radios provide limited information, usually related to only rainfall and temperature.

Photo credit: Gorakhpur Environmental Action Group (GEAG)

Early warning on rainfall is helpful during irrigation, sowing and harvesting stages. I can postpone or prepone crop sowing/harvesting and scheduling of irrigation based on advance rainfall information and this helps in reducing input costs and saving from unexpected losses.

Chanda Devi, district Gorakhpur, India

This case study is written as part of climate resilient agriculture projects implemented by Gorakhpur Environmental Action Group, Uttar Pradesh, India.

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