

Problem Statement:

Pradan is involved in many agricultural sustenance activities and works towards providing assistance in finding opportunities to enhance livelihoods by means of increasing agricultural productivity, among others. Pradan in partnership with Skymet launched the project to enhance agricultural productivity using weather forecasts in Ghagra, Gumla and Palkot in Gumla district of Jharkhand; Nagri in Dhamtari district of Chhattisgarh; Shahpur and Ghoradungri in Betul district and Kesla in Hoshangabad district of Madhya Pradesh. Skymet gave information of observations and weather forecasts to farmers through SWIMS. This information required to plan farming activities, appropriate use of irrigation and undertake sowing decisions in an optimal fashion.

Approach:

- Skymet installed 13 automatic weather stations (AWS) for the project
- The forecast for 141 locations (28 in Chhattisgarh, 72 in Jharkhand, 36 in Madhya Pradesh, and 5 in West Bengal) are being disseminated through SMS and web interface
- Different statistical techniques like LR, NLR methods tried to correct temperature and rainfall.
- Long range forecast (temperature and rainfall) is updated every month
- Monthly temperature anomaly (warmer or cooler than normal) and monthly percentage rainfall departure from climatological mean for whole India is also provided

Benefits:

- Rainfall prediction given by Skymet during Post-harvest helped farmers to save their produce
- The accuracy of medium-range forecasts was quite good. For all lead time of medium range forecasts (8-11 days, 12-15 days and 16-19 days) Yes/No forecast was highly successful.

