Installation of automatic weather stations (AWS) in rural villages for weather information





Skymet Weather Services Pvt. Ltd. (SKYMET) is a private weather information services provider in India. Under the project, SKYMET is installing 150 Automatic Weather Stations (AWS) at the taluka level in 4 states (Bihar, Jharkhand, Haryana and Maharashtra). Approximately 2 million farmers are benefitting from the AWS network expansion. The AWS, an automated version of the traditional weather station, enables measurement of various weather parameters from remote areas. These weather stations form a critical link in the Weather Based Crop Insurance Scheme (WBCIS) of the Government of India.

To provide a competitive service to the farmers private insurance companies – ICICI-Lombard, IFFCO-TOKIO, M.S Cholamandalam General Insurance Companies and Agriculture Insurance Company of India (AICI) – have also been involved in the implementation of WBCIS.

PROJECT RATIONALE

India's weather forecasting industry is at a nascent stage. Government data providers include the India Meteorological Department, Revenue Department, Water Resource Department, Agriculture University and Research Institutes. Private data providers include SKYMET, National Collateral Management Services (NCMSL), Weather Risk Management Services (WRMS) and Express Weather.

The Indian private weather consulting market has been witnessing a yearly growth of 25%. The market is currently estimated at Rs. 200 million and

PROJECT FACTS

UPNRM Support	Term Loan of USD 0.13 Million (INR 7.5 Million)
No. of Participants	2 million indirect beneficiaries
Project Duration	2012-2017

expected to grow 10% annually over the next 5 years. Apart from the traditional agriculture sector, there is increasing demand and potential from new age sectors like media houses, crop insurance companies, energy companies and agriculture service

Project Approach

The project support includes:

- 1. Short term (2/3/5/7 days) weather forecasts for farmers and commodity traders to plan and proceed in their daily activities more efficiently.
- Long term (seasonal) forecasts are used by power distribution companies to buy power at a cost advantage.
- Weather based crop advisory for farmers and commodity traders is used to inform farmers about agricultural activities at various stages of their crop. Commodity traders use weather reports to assess health and supply movements of agricultural commodities.
- 4. Short interval weather forecast (24 hours) has been customised for power utilities and distribution companies to identify power demand schedules.
- 5. Remote-sensing solutions for insurance and risk management companies to design their crop insurance products and fix premiums based on crop yield, production, and health at various stages of cultivation.
- 6. Wind resource assessment for wind farms to schedule power generation.

- 7. Route and sea-state forecasts and storms and cyclone warnings for shipping, oil and gas explorers and other sea farers to project routes and also understand the risk for man and materials while working at sea.
- 24X7 inclement weather and fog monitoring facility to track the ever changing weather across India on a continuous basis and to monitor and forecast fog, especially during winters in the Northwest of India. Any significant shifts, forecasts and outlook is shared via e-mail alerts.
- 9. Ready to print info-graphics for newspapers to provide city/edition wise weather information to leading newspapers in the country.
- 10. Ready to telecast info-graphics to provide national and state level weather information to leading news channels.
- 11. Round the clock weather updates from major Indian cities to news channels and websites .

Impact of the Project

The project provides weather data to the Agriculture Insurance Company of India (AICI) and other private players to support the implementation of the Weather Based Crop Insurance Scheme (WBICS). This directly benefits the farmers in the following way:

- Speedy settlement of claims, within 45 days from the end of the insurance period.
- The timely and accurate supply of data and forecasts to the insurance companies makes WBICS more transparent, impartial and efficient. The insured is not required to submit a claim form or other documents as proof for his or her loss. The claim payout is automatically calculated on the basis of weather data collected from the Reference Weather Station at the Tehsil and Block level.
- Weather forecasts have proven useful for organizing agricultural activities in cohesion with weather changes. Supports a multitude of companies for meeting the demand for products/services affected by the variations in seasonal weather.
- Facilitates power distribution companies to buy power in the long term thus providing them a cost advantage.





National Bank for Agriculture and Rural Development

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