SERVICES FOR FARMERS AND AGRICULTURE

FARMER'S WEATHER BULLETINS

Farmer's Weather Bulletins are issued daily by IMD's forecasting offices for broadcast in different regional languages through the stations of All India Radio in their evening programs for farmer's. A second bulletin is issued for broadcast in the morning during the rainy season. The bulletins are also published in newspapers. Farmer's Weather Bulletins provide a district-wise forecast of weather during the next 48 hours, with an outlook for the following 2 days, taking into account the effects of weather on crops grown in their respective regions.

AGROMETEOROLOGICAL ADVISORY SERVICE

India Meteorological Department (IMD) started weather services for farmers in the year 1945. It was broadcast by All India Radio in the form of Farmer’s Weather Bulletin (FWB). Subsequently, in the year 1976, IMD started Agro-Meteorological agricultural Advisory Service (AAS) from its State Meteorological Centers, in collaboration with Agriculture Departments of the respective State Governments. Though these services are being regularly provided by IMD for the past many years, the demand of the farming community could not be fully met due to certain drawbacks in the system. In view of that IMD launched Integrated Agromet Service in the country for 2007 in collaboration with different organizations/institutes. At present bulletins are being issued from three levels as mentioned below.
1) **National Agromet Advisory Bulletin**

   The bulletin is prepared for national level agricultural-planning & management and is being issued by National Agromet Advisory Service Centre, Agricultural Meteorology Division and India Meteorological Department. Prime users of this bulletin are Crop Weather Watch Group, (CWWG), Ministry of agriculture. Bulletin is also communicated to all the related Ministries (State & Central), Organizations, NGOs for their use.

2) **State Agromet Advisory Bulletin**

   This bulletin is prepared for State level agricultural planning & management. These bulletins are issued from 22 AAS units at different State capitals. Prime user of this bulletin is State ACWWG. This is also meant for other users like Fertilizer industry, Pesticide industry, Irrigation Department, Seed Corporation, Transport and other organizations which provide inputs in agriculture.

3) **District Agromet Advisory Bulletin**

   This is prepared for the farmers of the districts. These bulletins are being issued from 30 AMFUs functioning at State Agricultural Universities. This contains advisories for all the weather sensitive agricultural operations form sowing to harvest. It also includes advisories for horticultural crops and livestock. These weather based advisories are disseminated to the farmers through mass media dissemination, Internet etc as well as through district level intermediaries. The advisories will be communicated through multi-channel dissemination system.
AGRICULTURAL METEOROLOGY DIVISION

Head office Agricultural Meteorology Division of IMD is located at Pune.

- It maintains a network of agrometeorological observatories across the country with the cooperation of agricultural universities and research institutions. The Division provides technical assistance to the cooperating institutions for site selection, training of personnel, calibration of instruments and their maintenance, scrutiny of data, etc. Besides this, observations of evaporation, evapotranspiration, soil moisture and dewfall are made at IMD's own observatories. The Central Agrimet Observatory at Pune and the agrimet observatories at Bangalore, Anand and Rahuri have many specialized instruments and facilities for research.

- The Agricultural Meteorology Division prepares crop weather calendars, which depict the state and stage of the crop under normal weather conditions and the weather elements detrimental to the crops in various growth stages. The crop weather calendars are periodically revised as new crop varieties are introduced and cropping patterns undergo changes.

- Extensive analysis of past rainfall data has been carried out by IMD to help agricultural planning in drought-prone and dry land farming areas of the country. An Agroclimatic Atlas of India has been prepared. Aridity anomaly maps are compiled for the country on a fortnightly basis. IMD also estimates the crop yields of principal crops with the help of regression models which parameterize the effects of various weather parameters during the different growth stages of the crops.