

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

LOK SABHA
UNSTARRED QUESTION NO. 1361
TO BE ANSWERED ON THE 11TH FEBRUARY, 2025

LOW-COST MODERN TECHNOLOGIES

1361. SHRI KISHORI LAL:
PROF. SOUGATA RAY:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether the Government has proposed to develop low-cost Modern Technologies to help farmers to face the extreme weather conditions;
- (b) if so, the details thereof and if not, the reasons for not implementing such technologies to enhance the efficiency and resilience of Agri-value chains and promote digitization of a catalyst for agriculture transformation; and
- (c) whether the Government has prioritized areas of encouragement in diversification of agriculture, promotion of sustainable agriculture and channelising financial resources towards environmentally conscious and climate resilient farming and if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण राज्य मंत्री (SHRI RAMNATH THAKUR)

(a) to (c): To mitigate the impacts of adverse weather on agriculture, India Meteorological Department (IMD) runs a scheme viz. Gramin Krishi Mausam Sewa (GKMS) to render weather forecast-based operational Agrometeorological Advisory Services (AAS) involving several leading organizations such as Indian Council of Agricultural Research (ICAR), State Agriculture Universities (SAUs), Indian Institute of Technology (IIT), state agriculture departments, NGOs etc. for the benefit of farming community. This GKMS scheme assists farmers in making informed decisions regarding their day-to-day agricultural operations for minimizing crop damage and losses due to unusual weather and taking advantage of benevolent weather and climatic conditions.

Under GKMS, 130 Agromet Field Units (AMFUs) covering 127 agroclimatic zones located at various SAUs, ICAR, and IIT etc. are operational across the country. IMD provides medium-range weather forecasts for rainfall, temperature, relative humidity, cloud cover, wind speed, and direction at district and block levels for the next five days, along with subsequent week rainfall and temperature outlook at the meteorological sub-division level. Based on observed and forecasted weather, AMFUs prepare biweekly Agromet Advisories (every Tuesday and Friday) for their respective districts to help the farming community to make appropriate decisions about selection

of appropriate crop and varieties (including tolerant/ resistant varieties), choosing windows for various intercultural operations e.g. sowing, harvesting, weeding, threshing etc, irrigation scheduling, and fertilizer application. Impact-Based Forecast (IBF) for agriculture, along with associated Agrometeorological advisories are also issued by AMFUs during severe weather warnings such as heavy rainfall, hailstorms, heatwaves, cold waves, and strong surface winds etc. for different districts of various States and UTs across the country based on forecasts and warnings issued by NWFC New Delhi, as RMCs and MCs of IMD.

Agromet Advisories are disseminated through multichannel dissemination system, including print and electronic media, Doordarshan, radio, internet, and SMS through Kisan Portal and Public-Private Partnership (PPP) initiatives. SMS-based alerts and warnings along with suitable remedial measures, are being sent during extreme weather events like cyclone, deep depression etc. through Kisan Portal. Technological advancements have further enhanced accessibility, enabling farmers to receive location-specific forecasts through mobile apps such as 'Meghdoot' and 'Mausam.' Additionally, IMD has integrated its services with IT platforms of 16 state governments, allowing farmers to access information in both English and regional languages.

IMD in collaboration with the Ministry of Panchayati Raj (MoPR), has recently launched Panchayat-level weather forecasts covering nearly all Gram Panchayats in India. These forecasts are accessible through digital platforms such as e-Gramswaraj (<https://egramswaraj.gov.in>), Meri Panchayat app, e-Manchitra of MoPR, and Mausamgram of IMD, (<https://mausamgram.imd.gov.in>). To enhance the reach and effectiveness of the GKMS services, IMD is actively engaging with various stakeholders, including state agriculture departments, NGOs, and SAUs to create awareness among the farming community by organizing Farmers' Awareness Programs (FAPs) in collaboration with AMFUs across different regions of the country. Additionally, IMD, along with experts from AMFUs, actively participates in Kisan Melas, Farmers' Day Programmes, and field visits, facilitating direct interaction with farmers to promote the utilization of these weather-based agricultural advisory services, thereby maximizing their benefits for the farming community.
