

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

LOK SABHA
UNSTARRED QUESTION NO. 2373
TO BE ANSWERED ON 10TH DECEMBER, 2024

CLIMATE AND CROP MANAGEMENT INFORMATION

2373. SHRI VISHNU DAYAL RAM:

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

- (a) whether the Government has taken cognizance of the recommendations made by ICAR to enhance climate resilience in agriculture through District Level Contingency Plans (DLCPs);
- (b) whether the Government has taken any steps to promote location-specific climate-resilient crops, varieties, and management practices among State Governments and farmers; and
- (c) whether the Government has implemented any technology-driven initiatives, to ensure that farmers, receive timely climate and crop management information and if so, the details thereof?

ANSWER

MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE

कृषि और किसान कल्याण राज्य मंत्री (SHRI RAMNATH THAKUR)

(a) & (b): Yes, the Government has taken cognizance of the recommendations made by Indian Council of Agricultural Research (ICAR) to enhance climate resilience in agriculture through District Agricultural Contingent Plans (DACPs). ICAR is implementing a project namely National Innovations in Climate Resilient Agriculture (NICRA) that studies the impact of climate change on agriculture including crops, livestock, horticulture and fisheries. It also develops and promotes climate resilient technologies which helps the regions prone to extreme weather conditions like droughts, floods, frost, heat waves, etc. to cope with such extremes. During last 10 years (till October 2024), a total of 2593 varieties have been released by ICAR, out of these 2177 varieties have been found tolerant to one or more biotic and/or abiotic stresses.

Risk and vulnerability assessment of agriculture to climate change has been carried out at district-level for 651 predominantly agricultural districts as per Intergovernmental Panel on Climate Change (IPCC) protocols. Out of 310 districts identified as vulnerable, 109 districts have been categorized as 'very high' and 201 districts as 'highly' vulnerable. District Agriculture Contingency Plans (DACPs) for these 651 districts have also been prepared to address weather aberrations and recommending location specific climate resilient crops and varieties and management practices. For enhancing the resilience and adaptive capacity of farmers to climate variability, the concept of "Climate Resilient Villages" (CRVs) has been initiated under NICRA. Location-specific climate resilient technologies have been demonstrated in 448 CRVs of 151 climatically vulnerable districts covering 28 states / UTs for adoption by farmers. Capacity building programmes are conducted to educate the farmers on various aspects of climate change for wider adoption of climate resilient technologies.

Several schemes have also been initiated under National Mission on Sustainable Agriculture (NMSA) by the Government to deal with the adverse climate situations in the agriculture sector. Per Drop More Crop (PDMC) scheme was launched in 2015-16 to increase water use efficiency at the farm level through Micro Irrigation technologies i.e. drip and sprinkler irrigation systems. Rainfed Area Development (RAD) scheme is being implemented as a component under National Mission for Sustainable Agriculture (NMSA) from 2014-15. RAD focuses on Integrated Farming System (IFS) for enhancing productivity and minimizing risks associated with climatic variability. Mission for Integrated Development of Horticulture (MIDH), Agroforestry & National Bamboo Mission also promote climate resilience in agriculture. Further, Pradhan Mantri Fasal Bima Yojana (PMFBY) along with weather index based Restructured Weather Based Crop Insurance Scheme (RWBCIS) provide a comprehensive insurance cover against failure of the crop by way of providing financial support to farmers suffering crop loss/damage arising out of unforeseen natural calamities, adverse weather incidence and to help stabilize income of farmers and ensure their continuation of farming.

(c) India Meteorological Department (IMD) runs an operational Agrometeorological Advisory Services (AAS) viz., Gramin Krishi Mausam Sewa (GKMS) scheme specifically for the benefit of farming community in the country. Under the scheme, medium range weather forecast for next 5 days at District and Block level and also subsequent week Meteorological Sub-division wise rainfall and temperature forecast are generated by IMD. Based on the forecast, 130 Agromet Field Units (AMFUs),

located at State Agricultural Universities (SAUs), institutes of Indian Council of Agricultural Research (ICAR) and Indian Institute of Technology (IIT) prepare Agromet Advisories every Tuesday and Friday for the Blocks and Districts under their jurisdiction and communicate Agrometeorological Advisory to the farmers. AAS being run by IMD is a step towards weather-based crop and livestock management strategies dedicated to reduce crop damage and loss due to unusual weather.
