

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

LOK SABHA
UNSTARRED QUESTION NO. 318
TO BE ANSWERED ON THE 02ND DECEMBER, 2025

PROMOTION OF CLIMATE RESILIENT AGRICULTURE

318. DR. AMAR SINGH:

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

- (a) the steps taken by the Government to promote climate-resilient agriculture and support small and marginal farmers facing climate fluctuations affecting crop yields and livelihoods;
- (b) the details of Government initiatives promoting technology adoption, including remote sensing, AI, and early warning systems, to help farmers manage climatic risks such as droughts, floods, and pest invasions effectively; and
- (c) the details of Government's policies for expanding social protection measures like crop insurance and financial incentives under schemes such as Pradhan Mantri Fasal Bima Yojana and Paramparagat Krishi Vikas Yojana to ensure farmer resilience against climate-induced risks?

ANSWER

MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण राज्य मंत्री (SHRI RAMNATH THAKUR)

(a) & (b): Indian Council of Agricultural Research (ICAR) is implementing a project-National Innovations in Climate Resilient Agriculture (NICRA), that studies the impact of climate change on agriculture, conducts district level risk and vulnerability assessment of agriculture to future climate change. Under the project, 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. 310 districts were identified as vulnerable out of which 109 districts have been categorized as 'very high' and 201 districts as 'highly' vulnerable. For enhancing the resilience and adaptive capacity of farmers to climate variability, location-specific climate resilient technologies such as system of rice intensification, aerobic rice, direct seeding of rice, zero till wheat sowing, cultivation of climate resilient varieties tolerant to extreme weather conditions such as drought and heat; in-situ incorporation of rice residues etc. have been demonstrated under the project through KVKs in 448 Climate Resilient Villages. Capacity building for establishing village level seed banks and community nurseries is being

undertaken under NICRA project that enables availability of seeds in the adopted villages. Drought and flood tolerant climate-resilient varieties of rice, wheat, soybean, mustard, chickpea, sorghum, gram, and foxtail millet were demonstrated in several NICRA villages. Besides, training programmes are conducted under Agricultural Technology Management Agency (ATMA) on various issues of agricultural practices including creation of awareness on using quality seeds among the farmers.

To mitigate the impacts of adverse weather on agriculture, under the Gramin Krishi Mausam Sewa (GKMS) scheme, medium-range weather forecasts for the next 5 days at the district and block levels are generated by Indian Meteorological Department(IND). Based on rainfall and other weather parameters along with weather forecasts issued by IMD, 130 Agromet Field Units prepare Agromet Advisories in English as well as in the regional language for dissemination through multiple channels. Also, farmers access weather information including alerts and related agromet advisories specific to their districts through the mobile App viz., 'Meghdoot' launched by the Ministry of Earth Sciences which is available in English and 13 regional languages. These weather details are also accessible to farmers through 'Mausam' App of IMD. The Panchayat-level weather forecast information is accessible through multiple digital platforms, including: eGramSwaraj (<https://egramswaraj.gov.in/>), 'Gram Manchitra' Application of MoPR (<https://grammanchitra.gov.in/gm4MVC>), 'Meri Panchayat' Mobile App and Mausamgram web portal of IMD (<https://mausamgram.imd.gov.in/>).

(c): Pradhan Mantri Fasal Bima Yojana (PMFBY) provides comprehensive risk coverage against crop damage from pre-sowing to post-harvest for food crops (cereals, millets and pulses), oilseeds, and commercial/horticultural crops notified by the concerned State Government. The scheme not only safeguards against widespread yield loss due to non-preventable natural risks such as flood, inundation, landslide, drought, dry spells, hailstorm, cyclone, pests/diseases, natural fire/lightning, storm, typhoon, tempest, hurricane, and tornado, but also provides coverage against farm-level yield loss due to localized risks (hailstorm, landslide, inundation, cloudburst, and natural fire) and post-harvest losses due to cyclone, cyclonic/unseasonal rain, and hailstorm. As on 30.11.2025, claims amounting to ₹1,90,374 crore have been disbursed to approximately 2,301 lakh farmers since the scheme's inception in Kharif 2016 through Rabi 2024–25.

Organic farming is being promoted through Paramparagat Krishi Vikas Yojana (PKVY) in the States/UTs. The scheme stress on end-to-end support to farmers engaged in organic farming i.e. from production to processing, certification and marketing. Primary focus of the schemes is to form organic clusters, with preference to small and marginal farmers, to create a supply chain. Under PKVY, assistance of Rs. 31,500 per ha in 3 years is provided for promotion of organic farming. Out of this, assistance of Rs. 15,000 per ha is provided to farmers through Direct Benefit Transfer for on- farm /off –farm organic inputs. As on 31.10.2025, total area of 16.90 lakh hectares area has been covered under PKVY Scheme benefitting 28.24 lakh farmers.
