

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

LOK SABHA
UNSTARRED QUESTION NO. 2577
TO BE ANSWERED ON THE 16TH DECEMBER, 2025

IMPACT OF EXTREME WEATHER EVENTS ON FARMERS INCOME

2577. SHRI ARVIND DHARMAPURI:

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

- (a) whether the Government has assessed the impact of erratic monsoons, extreme weather events and rising input costs on farmers' income during the last five years;
- (b) if so, the findings of such assessments;
- (c) whether the Government proposes to revise the Pradhan Mantri Fasal Bima Yojana (PMFBY) framework to address climate-linked risks more effectively; and
- (d) the steps being taken to strengthen digital crop surveys, market intelligence and farmer price support mechanisms?

ANSWER

THE 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) has been implementing a project- National Innovations in Climate Resilient Agriculture (NICRA) since 2011. The project studies the impact of erratic monsoons, extreme weather events and climate change on agriculture. District level risk and vulnerability assessment of agriculture to future climate change and integrated simulation modelling studies for estimating the future projections of climate change are undertaken. Risk and vulnerability assessment of agriculture to climate change has been carried out 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.

(c): Pradhan Mantri Fasal Bima Yojana (PMFBY) provides comprehensive risk coverage against crop damage from pre-sowing to post-harvest for cereals, millets and pulses, oilseeds, and commercial or horticultural crops notified by the concerned State Government. The scheme safeguards against widespread yield loss due to natural risks such as flood, inundation, landslide, drought, dry spells, hailstorm, cyclone, pests/diseases, natural fire/lightning, storm, typhoon, tempest, hurricane, and tornado. It 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, unseasonal rain, and hailstorm.

(d): The Government has been strengthening digital crop surveys by leveraging Artificial Intelligence (AI) and IoT-enabled systems to enhance crop productivity, improve sustainability, and support farmer livelihoods. AI-based analytics using field photographs and satellite imagery are being deployed for crop-weather matching and monitoring of sowing patterns. Market intelligence is being strengthened through platforms such as the National Agriculture Market (e-NAM), Agri-stack, real-time data collection, and digital dashboards for monitoring arrivals, prices, and demand–supply trends. The Department has integrated 1,522 mandis with the e-NAM platform across 23 States and 4 Union Territories. As on 30.06.2025, a total of 1.79 crore farmers and 2.71 lakh traders have registered on the e-NAM portal, and trade of 12.54 crore MT and 49.15 crore numbers (including bamboo, betel leaves, coconut, lemon and sweet corn) valued at approximately ₹4.57 lakh crore has been recorded on the platform. To ensure that farmer gets fair price of his produce, Government has taken various steps including implementation of Minimum Support Price (MSP) policy, expansion of procurement operations, and risk coverage through PMFBY, ensuring assured returns, reducing market volatility, and stabilising farm income.
