

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

LOK SABHA
UNSTARRED QUESTION NO. 3776
TO BE ANSWERED ON THE 12TH AUGUST, 2025

FOOD SHORTAGE

3776. SHRI. ARUN KUMAR SAGAR:

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

- (a) whether global warming is expected to cause food shortage in the country;
- (b) if so, the details thereof;
- (c) whether the Government has taken/proposes to take any steps in this regard; and
- (d) 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 (d): Indian Council of Agricultural Research (ICAR) under its flagship network project National Innovations in Climate Resilient Agriculture (NICRA) conducted seasonal climate change projections using 33 global climate models in India. These studies indicated that in the absence of adoption of adaptation and mitigation measures, global warming is likely to reduce agricultural yield.

The Government has taken several steps to address the challenges of global warming and climate change on agriculture in the country. The National Action Plan on Climate Change (NAPCC) provides an overarching policy framework to enable the country to adapt to climate change and enhance ecological sustainability. One of the National Missions under NAPCC is the National Mission for Sustainable Agriculture (NMSA), which implements strategies to make agriculture more resilient to the changing climate. Several schemes have also been initiated under NMSA to deal with the adverse climate situations. Per Drop More Crop (PDMC) scheme increases water use efficiency at the farm level through micro irrigation technologies i.e. drip and sprinkler irrigation systems. Rainfed Area Development focuses on Integrated Farming System for enhancing productivity and minimizing risks associated with climatic variability. The Soil Health & Fertility scheme assists states in promoting integrated nutrient management through judicious use of chemical fertilizers including secondary and micronutrients in conjunction with organic manures & bio-fertilizers for improving soil health and its productivity. Mission for Integrated Development of Horticulture, Agroforestry & National Bamboo Mission also promote climate resilience in agriculture. Further, Pradhan Mantri Fasal Bima Yojana along with weather index based Restructured Weather Based Crop Insurance Scheme provide a comprehensive insurance cover against crop failure by providing financial support to farmers suffering crop loss/damage arising out of unforeseen natural calamities.

Further Indian Council of Agricultural Research (ICAR) has released a total of 2900 varieties have been released during last 10 years (2014- 2024). Out of which, 2661 Varieties are tolerant to one or more biotic and/or abiotic stresses. 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 use by the State Departments of Agriculture. Location-specific climate resilient technologies have been demonstrated in 448 CRVs of 151 climatically vulnerable districts covering 28 states / UTs for adoption by farmers. ICAR through its NICRA project, creates awareness about impact of climate change in agriculture among farmers. Capacity building programmes are being conducted to educate the farmers on various aspects of climate change for wider adoption of climate resilient technologies.
