

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

**RAJYA SABHA**  
**UNSTARRED QUESTION NO- 484**  
TO BE ANSWERED ON 26/07/2024

**IMPACT OF CLIMATE CHANGE ON FARMERS**

484. SHRI S. KALYANASUNDARAM:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether Government has recognized the disproportionate impact of climate change on farmers in disaster-prone regions;
- (b) if so, the details of the impact assessment conducted on the issue;
- (c) whether Government has undertaken initiatives to train village panchayats to create awareness among farmers about climate-resilient farming; and
- (d) if so, the details thereof, if not, the reasons therefor?

**ANSWER**

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI SHIVRAJ SINGH CHOUHAN)

(a) to (d): The Indian Council of Agricultural Research (ICAR) under Ministry of Agriculture and Farmers Welfare, Government of India has launched a flagship network project namely National Innovations in Climate Resilient Agriculture (NICRA). The project aims to study the impact of climate change on agriculture including crops, livestock, horticulture and fisheries and to develop and promote climate resilient technologies in agriculture which will address vulnerable areas of the country and the outputs of the project help the districts and regions prone to extreme weather conditions like droughts, floods, frost, heat waves, etc. to cope with such extremes. The salient achievements of ICAR are as follows:

- During last 10 years (2014-2024), 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 is carried out at district-level for 651 predominantly agricultural districts as per Intergovernmental Panel

on Climate Change (IPCC) protocols. A total of 109 districts are categorized as ‘very high’ and 201 districts as ‘highly’ vulnerable.

- District Agriculture Contingency Plans (DACPs) for these 651 districts have been prepared for weather aberrations like drought, floods, unseasonal rains and extreme weather events such as heat wave, cold wave, frost, hailstorm, cyclone etc. and recommending location specific climate resilient crops and varieties and management practices for use by the State departments of agriculture and farmers.
- Enhancing 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 demonstrated in 448 CRVs of 151 climatically vulnerable districts for adoption by the 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. The Climate Resilient Agriculture (CRA) Technology is implemented in 448 CRVs across 151 districts of 28 states/UTs. The Government has undertaken initiatives to deal with climate change through the National Mission for Sustainable Agriculture (NMSA), which is one of the Missions within the National Action Plan on Climate Change (NAPCC). The mission aims to evolve and implement strategies to make Indian agriculture more resilient to the changing climate. Awareness/capacity building of farmers is an important part of the NMSA strategy. Initially NMSA was approved for three major components comprising, Rainfed Area Development (RAD); On-Farm Water Management (OFWM); and Soil Health Management (SHM). Subsequently, new programmes such as Soil Health Card (SHC), Paramparagat Krishi Vikas Yojana (PKVY), Mission Organic Value Chain Development in North Eastern Region (MOVCDNER), Per Drop More Crop, National Bamboo Mission (NBM) etc. were also included.

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