

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

**RAJYA SABHA UNSTARRED QUESTION NO- 506**

TO BE ANSWERED ON 26/07/2024

**IMPACT OF CLIMATE CHANGE ON FOOD SECURITY**

506. SHRI K.R. SURESH REDDY:

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

- (a) whether Government has realized the significance of addressing the issue of climate change and implementing sustainable agricultural practices to mitigate its impact on food security; and
- (b) if so, the details of the steps that have been taken/proposed to be taken by Government keeping in view volume of work that remains to be done to safeguard food security for future with an uncertain climate?

**ANSWER**

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE  
(SHRI SHIVRAJ SINGH CHOUHAN)

- (a) & (b): To address the issue of climate change the Government is implementing National Mission for Sustainable Agriculture (NMSA) with the aim to make Indian agriculture more resilient to the changing climate. The NMSA is one of the missions under National Action Plan on Climate Change (NAPCC) which supports sustainable agricultural production in the country through its various schemes. 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.

To safeguard food security for future in the face of changing climate 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 will 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 under 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.
- Capacity building programmes are being conducted to educate the farmers on various aspects of climate change for wider adoption of climate resilient technologies.

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