

GOVERNMENT OF INDIA  
MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE  
**RAJYA SABHA**

**UNSTARRED QUESTION NO. 1462**

TO BE ANSWERED ON 15/12/2023

**CRISIS INDUCED BY CLIMATE CHANGE**

1462. SHRI IMRAN PRATAPGARHI:

SHRI DIGVIJAYA SINGH:

SHRI K.R.N. RAJESHKUMAR:

SMT. PHULO DEVI NETAM:

SMT. RANJEET RANJAN:

DR. AMEE YAJNIK:

SHRI DHIRAJ PRASAD SAHU:

SHRI K.C. VENUGOPAL:

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

- (a) whether Government is aware of the climate change-related hunger crisis in the country and if so, the details thereof;
- (b) whether it is a fact that the climate crisis, extreme weather, irregular rainfall and drought has led to decline in foodgrains production and increased structural rural poverty;
- (c) whether it is also a fact that a major proportion of the population is facing food insecurity in the country; and
- (d) if so, steps taken by Government to provide food and financial security to the effected people, now and in the future?

**ANSWER**

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI ARJUN MUNDA)

(a) to (d): Climate change events like extreme weather, irregular rainfall and drought, are known to have impact on food grains production. However, to deal with the impact of climate change in food grains production, the Government is implementing National Mission for Sustainable Agriculture (NMSA). The NMSA is one of the Missions within the National

Action Plan on Climate Change (NAPCC) which aims to evolve and implement strategies to make Indian agriculture more resilient to the changing climate and to sustain food grains production. NMSA was approved for three major components i.e. 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. Although climate change is understood to have its negative impact on food grain production, the negative impacts have been dealt with effectively through the help of technology. With the Government interventions, the food grains production has continuously increased in the country during last 5 years despite the impact of climate change which can be seen in the below table.

(In million tonnes)

Year	2018-19	2019-20	2020-21	2021-22	2022-23
Production of food grains	285.21	297.50	310.74	315.72	329.687

The Government enacted the National Food Security Act, 2013 which provides food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a life with dignity. The Act provides for coverage of up to 75% of the rural and up to 50% of the urban population, i.e. about two-thirds of the total population of the country.

To meet the challenges of sustaining domestic food production 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:

1. ICAR has released 2380 high yielding varieties / hybrids of field crops for different agro-climatic conditions during 2014-15 to 2022-23. Out of which 1888 varieties are biotic and abiotic stress tolerant.

2. Sixty-eight location-specific climate resilient technologies have been developed and popularized for wider adoption among the farming communities.
3. Agricultural contingency plans for 650 districts have been prepared and made available online for policy makers to take decisions in the event of delayed monsoons and other extreme weather events.
4. District level risk and vulnerability assessment of Indian agriculture to climate change has been prepared which is useful for several Ministries/ Departments for prioritizing resources towards developmental programs.
5. Based on vulnerability assessment, climate resilient technologies are being demonstrated on farmer's fields in 151 clusters covering 446 villages.

To protect the farmers from climate hazards, Government has introduced flagship yield based Pradhan Mantri Fasal Bima Yojana (PMFBY) along with weather index based Restructured Weather Based Crop Insurance Scheme (RWBCIS) from Kharif 2016. The scheme aims at supporting sustainable production in agriculture sector by way of providing financial support to farmers suffering crop loss/damage arising out of unforeseen natural calamities, adverse weather incidence and to help in stabilize the income of farmers to ensure their continuance in farming. Comprehensive risk insurance to farmers is provided against unpreventable natural calamities such as drought, dry-spells, flood, hailstorm, inundation etc. under the scheme for entire crop cycle including pre-sowing to post-harvest losses.

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