

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

LOK SABHA
STARRED QUESTION NO. 86
TO BE ANSWERED ON 13th DECEMBER, 2022

FOODGRAIN CRISIS DUE TO CLIMATE CHANGE

*86. SHRI N. REDDEPPA

Will the Minister of AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether the Government has conducted any comprehensive study on the effect of climate change on food grain crisis in the country;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) whether the Government has taken any corrective steps to address the adverse impact of climate change on the foodgrain crisis in the country;
- (d) if so, the details thereof and if not, the reasons therefor;
- (e) whether the Government is implementing any scheme to enhance the foodgrain yield through sustainable methods; and
- (f) if so, the details thereof and if not, the reasons therefor?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

(a) to (f): A statement is laid on the table of the House.

**STATEMENT REFERRED TO IN REPLY TO PART (a) TO (f) OF LOK SABHA
STARRED QUESTION NO. 86 DUE FOR ANSWER ON 13th DECEMBER, 2022.**

(a) & (b): 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 developed resilient varieties in different crops tolerant to climatic stresses to improve the food grain production in the face of changing climate. Since 2014, a total of 2122 varieties have been released out of which 1752 are climate resilient varieties which includes 400 abiotic stress tolerant varieties and 1352 are biotic 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 State officials have been sensitized for preparedness through 57 State-level interface meetings during the past eight years. Agricultural contingency plans have been 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.
6. At present, ICAR in collaboration with India Meteorological Department (IMD) is issuing Agromet advisories twice a week (Tuesday and Friday) to around 6 crore farmers of the country through Gramin Krishi Mausam Seva program. The advisories are reaching the farmers through m-KISAN portal, WhatsApp groups, SMS services etc.

7. During the past decade, 16,958 capacity building programs were conducted throughout the country under NICRA project to educate stakeholders on various aspects of climate change and resilient technologies, covering 5,14,816 different stakeholders including farmers so as to enable wider adoption of climate resilient technologies.

(c) to (f): Yes, to deal with the impact of climate change in food grain production, the Government is implementing National Mission for Sustainable Agriculture (NMSA). 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 increase in production. To promote efficient use of water and fertilizer through micro-irrigation, Per Drop More Crop (PDMC) scheme is being implemented for which an amount of Rs. 16815.66 crore has been incurred with area coverage of 70.04 lakh ha. Rainfed Area Development (RAD) scheme is being implemented to promote sustainable Integrated Farming System with an area coverage of 6.74 lakh ha. for which an expenditure of Rs. 1511.56 crore has been incurred. For promoting organic farming, under Mission Organic Value Chain Development in North East Region (MOVCDNER), 379 Farmer Producer Companies have been formed comprising of 1.89 lakh farmers and covering an area of 1.73 lakh ha. Mission for Integrated Development of Horticulture (MIDH) is being implemented in which so far Rs. 13300.08 crore has been released with area coverage of 11.26 lakh ha. Paramparagat Krishi Vikas Yojana (PKVY) was initiated to promote organic farming in the country and so far 11.80 lakh ha area has been covered with 16.19 lakh farmers being benefitted. Soil health Cards/Soil Health Management Scheme is being implemented for which an expenditure of Rs. 1335.68 crore has been incurred so far for various activities for improving soil health and its fertility. Till now 22.71 crore grid based soil health cards have been distributed to farmers under the scheme.

Although climate change is understood to have its negative impact on food crops, through the help of technology, the negative impacts have been dealt with effectively. 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	2017-18	2018-19	2019-20	2020-21	2021-22
Production of food grains	285.01	285.21	297.50	310.74	315.72
