

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

RAJYA SABHA
UNSTARRED QUESTION NO-645
TO BE ANSWERED ON 08/12/2023

EFFECT OF CLIMATE CHANGE ON FOODGRAIN CRISIS

645. DR. KANIMOZHI NVN SOMU:

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

- (a) whether Government has conducted any comprehensive study on the effect of climate change on foodgrain crisis in the country;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) whether 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 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

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE
(SHRI NARENDRA SINGH TOMAR)

(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 studying at the impact of climate change on agriculture including crops, livestock, horticulture and fisheries and to develop and promote climate resilient technologies in agriculture for addressing vulnerable areas of the country, 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. 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 are climate resilient varieties. Sixty-eight location-specific climate resilient technologies have also been

developed and popularized for wider adoption among the farming communities in vulnerable districts. 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. 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. Based on vulnerability assessment, climate resilient technologies are being demonstrated on farmer's fields in 151 clusters covering 446 villages.

(c) to (f) Yes, to deal with the impact of climate change in food grains 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 of evolving and implementing 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 namely 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. The National Food Security Mission (NFSM) scheme is being implemented in all the 28 States and Union Territories of Jammu & Kashmir and Ladakh with the objectives of increasing foodgrains production through area expansion and productivity enhancement in a sustainable manner, restoring soil fertility and productivity at the individual farm level and enhancing farm level economy to restore confidence amongst the farmers.

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
