

LOK SABHA
UNSTARRED QUESTION NO. 2356
TO BE ANSWERED ON 6TH AUGUST, 2024

IMPACT OF CLIMATE CHANGE ON FOOD CROPS

2356. MS. S JOTHIMANI:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि और किसान

कल्याण मंत्री be pleased to state:

- (a) whether the Government has conducted any studies on climate change and its impact on producing food products like wheat, paddy, millet and other crops and if so, the details thereof;
- (b) whether the Government has taken any steps to improve and prevent any shortage of food products in the future;
- (c) whether the Government has taken any steps to secure and supply food products amid natural calamities, pandemic and unpredictable seasons; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE

कृषि और किसान कल्याण राज्य मंत्री (SHRI BHAGIRATH CHOUDHARY)

(a) Yes. Indian Council of Agricultural Research (ICAR) using Integrated computer simulation modelling study has revealed that, in the absence of adoption of adaptation measures, climate change projections are likely to reduce rainfed rice yields by 20% in 2050 and 47% in 2080 scenarios while, irrigated rice yields by 3.5% in 2050 and 5% in 2080 scenarios, wheat yield by 19.3% in 2050 and 40% in 2080 scenarios, kharif maize yields by 18 to 23% in 2050 and 2080 scenarios, respectively. Soybean yields are projected to increase by 3-10% in 2030 and 14% in 2080 scenarios.

(b) Yes. In order to improve future food production in the face of changing climate, ICAR has developed sustainable technologies and climate resilient varieties tolerant to one or more biotic and/or abiotic stresses.

During last 10 years, a total of 2593 varieties of wheat, rice, millets and other crops have been released by ICAR, out of these 2177 varieties are climate resilient to encounter adverse impact of climate change. Sustainable production technologies like soil health management, site specific nutrient management, soil and water conservation, in-situ water conservation, micro-irrigation, conservation agriculture, integrated farming system etc were developed and disseminated. As a result, the food grain production of the country has been continuously increasing from 257.1 million tons in 2012-13 to 329.6 million tons in 2022-23.

(c) & (d): Yes. As part of food security, the Government of India has launched Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY). In this scheme, the entitlement is 35 kg of food grain per Antyodayas Anna Yojana household per month and 5 kg of food grains per person per month in case of priority household. In addition to regular allocations, Department of Food & Public Distribution (DFPD) allocates additional food grains for festivals, natural calamities and law & order situation to States/UTs in accordance of extant policy of DFPD.