

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

RAJYA SABHA
UNSTARRED QUESTION NO. 3374
TO BE ANSWERED ON THE 31/03/2023

IMPACT OF HOT WEATHER ON WHEAT CROP

3374. SHRI SUSHIL KUMAR GUPTA:

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

- (a) whether Government has done any assessment of the adverse impact of hot weather on the wheat crop;
- (b) if so, the details thereof;
- (c) if not, the reasons therefor; and
- (d) the steps taken to ensure that farmers have a progressive outlook and follow scientific advice so that the yield loss, if any, is not very high due to hot weather?

ANSWER

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

(a) to (d): In the month of February 2023, though the maximum temperature was hovering around 32-33°C in most of the northern plains, it did not impact the wheat grain growth since the crop canopy temperature can be easily modulated by 2-3°C less than the air temperature by irrigation.

For the period from 16th to 22nd March 2023, scattered to fairly widespread light/moderate rainfall has been received over Punjab, Haryana, Delhi, Uttar Pradesh and Rajasthan due to which the maximum temperatures were near normal or below normal over these parts. In the current scenario, it is too early to predict any damage to the wheat crop due to heat stress. Agriculture being a state subject, the State Governments employ various measures for assessment of crop loss in the event of natural calamities including hot weather.

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 extreme events.

The ICAR-Indian Institute of Wheat and Barley Research (IIWBR), Karnal is working on developing climate resilient varieties and also keeping strict vigil on disease situation in the country. During 2014 to 2023, a total of 156 wheat varieties have been released. The wheat varieties such as DBW303, DBW187 etc. have average yield of 8 tonnes per hectare. Further, 28 bio-fortified varieties of wheat have been developed by ICAR which are rich in multi-nutrients such as DBW327, DBW332, DDW47 etc.

To address the adverse effect of natural risks on crops, Government ensures comprehensive risk cover for crops of farmers against all non-preventable natural risks including heat waves, pest and diseases from pre-sowing to post harvest stage under the Pradhan Mantri Fasal Bima Yojana (PMFBY) which is being implemented in the country from Kharif 2016. It is voluntary scheme for state and farmers.
