

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

LOK SABHA
STARRED QUESTION NO. 131
TO BE ANSWERED ON 26TH JULY, 2022

EFFECT OF HEAT WAVE ON AGRI-PRODUCE

*131. SHRIMATI RAKSHA NIKHIL KHADSE:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether the Government is finding ways and initiating steps to tackle the issue of increasing temperature and heat wave which are resulting in lower yield in all agri-produce thereby affecting the income of the farmers;
- (b) if so, the details thereof;
- (c) whether the Government proposes to study the effect of heat wave on the agriculture plantation by which certain new diseases are spreading and spoiling the plants thereby affecting the yield of the crops; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE
कृषि एवं किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

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

**STATEMENT REFERRED TO IN REPLY TO PART (a) TO (d) OF LOK SABHA
STARRED QUESTION NO. 131 DUE FOR ANSWER ON 26TH JULY, 2022**

(a) to d): The Government is finding ways and initiating steps to tackle the issue of increasing temperature and heat wave. The DA&FW issues advisories to the States through the Crop Development Directorates (CDDs) in consultation with State Agricultural Universities (SAUs) / Krishi Vigyan Kendra (KVKs) for creating an awareness campaign and to implement contingency plans as per local need. Besides, the India Meteorological Department under the Ministry of Earth Sciences issues weather based operational agrometeorological advisories jointly with ICAR and SAUs under the Gramin Krishi Mausam Sewa (GKMS) Scheme. Agromet advisories are also communicated to farmers through multichannel dissemination systems like the print and electronic media, Doordarshan, radio, internet etc. A mobile App viz., 'Meghdoot' has been launched by the Ministry of Earth Sciences, to help farmers to obtain weather information including alerts and related agromet advisories specific to their districts. The Kisan Suvidha App of Ministry of Agriculture and Farmers Welfare also issues alerts & advisories to farmers.

Climate resilient varieties of seeds in different crops tolerant to climatic stresses have been developed by the Indian Council of Agricultural Research (ICAR). 177 varieties were evaluated in the farmers field across the country for different climate extremes like floods, droughts, heat wave etc. that were developed by State Agricultural Universities and ICAR institutes in various programme. ICAR has also launched a flagship network project NICRA. 8 climate resilient varieties have been developed exclusively under the 'National Innovations in Climate Resilient Agriculture' (NICRA) programmes. The project is being implemented through different components viz., strategic research on adaptation and mitigation, demonstration of technologies on farmers' fields in 151 clusters of villages one each from climatically vulnerable districts and creating awareness among farmers and other stakeholders to minimize the climatic change impacts on agriculture. The project aims to develop and promote climate resilient technologies that help the districts and regions prone to extreme weather conditions like droughts, floods, frost, heat waves, etc., to cope with such extremes.

Indian Council for Agricultural Research Institute for Dryland Agriculture Central Research Institute for Dryland Agriculture (ICAR-CRIDA) formulates District Agriculture Contingency Plan (DACP) for 650 districts to mitigate the impact of weather related challenges and circulates to all State Agriculture Departments. The plan contains suitable technology interventions.

To address the adverse effect of natural risks on crops, DA&FW 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 Pradhan Mantri Fasal Bima Yojana (PMFBY) which is being implemented in the country from Kharif 2016. It is a voluntary scheme for States and farmers.

To deal with long term impacts of Climate Change, the Government of India is taking several steps. National Mission for Sustainable Agriculture (NMSA) is one of the Missions within the National Action Plan on Climate Change (NAPCC). The mission aims to evolve and implement strategies to make Indian agriculture more resilient to the changing climate. NMSA was approved for three major components i.e. Rainfed Area Development (RAD); On Farm Water Management (OFWM); and Soil Health Management (SHM). Subsequently, four new programmes were introduced namely Soil Health Card (SHC), Paramparagat Krishi Vikas Yojana (PKVY), Mission Organic Value Chain Development in North Eastern Region (MOVCDNER). During 2015-16, Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was operationalised wherein the OFWM component of NMSA was subsumed under Per Drop More Crop (PDMC) component of PMKSY. In addition to the aforementioned programmes under NMSA, the Restructured National Bamboo Mission (NBM) was launched in April 2018.

To study the impact of extreme heat events that occurred recently and to evolve steps to tackle them the ICAR-CRIDA has conducted a study on “Heat Wave 2022 Causes, Impacts and Way Forward for Indian Agriculture”.

The study on real time pest dynamics in relation to climate variability has been conducted in India by ICAR-CRIDA and ICAR-National Centre for Integrated Pest Management (NCIPM) under NICRA. ICAR has adopted the NICRA project which is operational throughout the country involving almost all SAUs/ ICAR institutes. Important crops and pests/ diseases are taken care of and remedies are provided through agro advisories/ extension services.
