

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

RAJYA SABHA
UNSTARRED QUESTION NO-350
ANSWERED ON- 09/12/2022

PROMOTING HEAT-RESISTANT VARIETY OF WHEAT

350. SHRI S NIRANJAN REDDY:

Will the MINISTER OF AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether several heat-tolerant varieties of wheat such as PBW 803, DBW 187 and DBW 222 can tolerate high temperatures and produce normal yields as compared to local variety of HD-3086, according to report published by Indian Council of Agricultural Research (ICAR);
- (b) if so, whether Government propose to promote the use of heat-resistant variety of wheat amongst the farmers in the country, if so, details thereof; and
- (c) whether any pilot project has been undertaken by Government to check the feasibility, product quality and impact of heat-resistant wheat on soil and underground water in the country, if so, details thereof?

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

(a): The wheat varieties DBW 187 and DBW 222 have been found superior over HD-3086 as far as heat tolerance is concerned. During the crop season 2021-22, the varieties namely DBW 187 and DBW 222 have shown heat tolerance with yield gain of 3.6% and 5.4%, respectively as compared to HD-3086 (Source: AICRP on Wheat and Barley progress report, 2020-21 & 2021-22).

The variety PBW 803 developed by the Punjab Agricultural University (PAU), Ludhiana is suitable for irrigated timely sown condition and resistant to brown rust as well as moderately resistant to stripe rust. This variety is not recommended as heat-tolerant variety.

(b): The Government aims to promote the use of heat-resistant varieties amongst the farmers through public and private partnership and providing seed directly to the farmers. To promote the use of these varieties, the Indian Institute of Wheat and Barely Research (IIWBR), Karnal under ICAR has signed 250 Memorandum of Agreements (MoAs) for DBW 187 and 191 MoAs for DBW 222 with private companies for seed production. The institute has distributed more than 2500 quintal seeds of DBW 187 and 1250 quintal seeds of DBW 222 during the crop season, 2021-22.

(c): Yes, The ICAR-IIWBR Karnal has initiated a specific research project entitled “Breeding high yielding wheat genotypes for stress conditions of warmer regions of India” on heat tolerant varieties. Besides, ICAR-IIWBR Karnal is also collaborating with International Maize and Wheat Improvement Centre (CIMMYT), Mexico on development of climate resilient wheat varieties.
