

(b) if so, the details thereof alongwith the steps taken to publicize these varieties among farmers; and

(c) the further steps taken by Government to leverage opportunities from Frontier sciences like bio-technologies and synthetic biology to develop climate resilient solution for farm sector and free it from clutches of weather vagaries?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (SHRI SUDARSHAN BHAGAT): (a) and (b) Yes, Sir. The ICAR-Indian Agricultural Research Institute (IARI) has been undertaking extensive research to develop drought resistant/tolerant varieties of crops. The concerted efforts have led to development of 19 such varieties comprising rice (2), wheat (4), pearl millet (3), maize (2), chickpea (4), pea (1), lentil (1), pigeonpea (1) and karan rai (1) during 2005-2016. These varieties are/were publicized through print and electronic media as well as organizing trainings for farmers, development personnel, Kisan Mela, Kisan Gosthi and scientist-farmer interactions. ICAR-IARI also provided 5754 quintals of breeder seeds of cereals, pulses and oilseed crops during 2015-16 to the indenters like public as well as private sector Organizations to produce foundation, certified and Truthfully Labeled (TL) seeds, for making quality seed available to the farmers at affordable prices.

(c) Interventions have also been made through frontier sciences like bio-technologies and synthetic biology to develop biotic and abiotic stress tolerant and climate resilient varieties/lines. Till date, 8 varieties of rice and one of pearl millet have been developed using Marker Assisted Selection (MAS). Genetically Modified (GM) sorghum, brinjal, banana, tomato and castor possessing disease and insect resistance have been developed and ready for biosafety examination. Bt cotton is the only GM crop approved for cultivation in India subsequent to extensive evaluation and regulatory process in 2002.

Decrease in production of foodgrains

1933. SHRIMATI JAYA BACHCHAN: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether Government has taken note of the decreasing foodgrain production and rising population in the country;

(b) whether Government plans to launch a second green revolution, especially in eastern India; and

(c) if so, the details thereof and if not, the reasons therefor?

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE (SHRI S. S. AHLUWALIA): (a) The details of rice, wheat and total foodgrains production in the country is given below:—

(Million Tonnes)			
Crop	2013-14	2014-15	2015-16*
Rice	106.65	105.48	104.32
Wheat	95.85	86.53	93.50
Total Food Grains	265.04	252.02	252.22

* 4th advance estimates.

The total foodgrains production came down to 252.02 and 252.22 million tonnes in 2014-15 and 2015-2016, respectively. The decline in the foodgrains production is due to continuous drought in kharif seasons of two years and moisture stress at sowing time as well as hailstorm and unseasonal rains at maturity stage of rabi food grains crops. However, the availability of rice and wheat was sufficient to meet the demand of growing population of the country in both years. The production of kharif foodgrains in 2016-17 is expected about 135.03 million tonnes (as per first advance estimates) *i.e.* higher than all previous kharif seasons.

(b) and (c) Government of India has been implementing the programme of Bringing Green Revolution to Eastern India (BGREI), a Sub-Scheme of Rashtriya Krishi Vikas Yojana (RKVY) in seven Eastern States namely Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, West Bengal and Eastern Uttar Pradesh from 2010-2011 to address the constraints limiting the productivity of rice based cropping systems.

Under this scheme, various activities like cluster demonstrations of improved package of practices, production and distribution of hybrids/high yielding varieties seed of rice and wheat, Integrated Nutrient Management (INM), Integrated Pests Management (IPM), assets building, site specific activities, post harvest and marketing support and cropping system based trainings are being undertaken to increase production and productivity of rice and wheat in Eastern region of the country.

Extending support to farmers in case of crop failure

1934. SHRI ANUBHAV MOHANTY: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether Government is willing to stand as guarantor for the loan taken by farmers for agricultural purposes in order to ensure that they do not commit suicide in case of crop failure for which they had availed the loan; and