

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

STARRED QUESTION NO:299

ANSWERED ON:11.02.2014

GM CROPS

Chitthan Shri N.S.V.;Majhi Shri Pradeep Kumar

Will the Minister of AGRICULTURE be pleased to state:

- (a) the details of research conducted by Agricultural Universities/Research Institutions in the country on Genetically Modified (GM) crops in the country;
- (b) the GM crops introduced along with its success rate in the country;
- (c) whether these crops have adverse impact on the environment, human health and on livestock;
- (d) if so, the details thereof; and
- (e) the measures taken/proposed to be taken by the Government to ensure that traditional crops are not replaced with GM crops without adequate research?

Answer

THE MINISTER OF AGRICULTURE (SHRI SHARAD PAWAR)

(a) to (e): A Statement is laid on the Table of the House.

STATEMENT IN RESPECT OF PARTS (a) to (e) OF LOK SABHA STARRED QUESTION NO. 299 TO BE ANSWERED ON 11/02/2014 REGARDING "GM CROPS"

(a) The National Agricultural Research System comprising of Indian Council of Agricultural Research (ICAR) and State /Central Agricultural Universities are engaged in developing Genetically Modified (GM) Crops, viz., cereals, pulses, oilseeds, fibres, fruits and vegetables. The target traits for the development of GM crops comprise of tolerance to biotic and abiotic stresses, herbicide tolerance, nutritional and keeping quality. The details are given in Annexure-I.

(b) Bt cotton is the only transgenic crop approved for cultivation in India subsequent to extensive evaluation and regulatory process in the year 2002. Bt cotton was introduced primarily for bollworm control. Yields of cotton stagnating at about 300 kg/ha from 1992 to 2002 rose to 488 kg/ha during 2013. Further, subsequent to its introduction, the average insecticide usage decreased from 0.88 kg/ha (2002) to 0.56 kg/ha during 2011. Presently, about 95% cotton area is under Bt cotton.

(c) & (d): No Madam; there are no credible scientific reports indicating that GM crops have adverse impact on the environment, human health and livestock.

(e) The Government of India follows a policy of case by case approval of genetically modified (GM) crops. The bio-safety assessment, efficacy and agronomic performance of transgenic seeds, extensive evaluation and regulatory approval process takes place before any GM crop is approved for commercial cultivation. A final view on the commercialization of GM crops is taken only when there is a clear economic and technical justification for release. The Government is also taking necessary steps such as maintenance of isolation distance, measures to prevent pollen flow, storage of germplasm in gene banks/repositories etc. to ensure that traditional crops are not replaced by GM crops without adequate research. Besides, traditional crops are maintained with option of using in pre-breeding or hybridization for crop improvement.