

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:1184

ANSWERED ON:13.08.2013

GM CROPS

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Will the Minister of AGRICULTURE be pleased to state:

- (a) the number of Genetically Modified (GM) crops that have been introduced for commercial cultivation in the country;
- (b) whether any objections were raised from certain quarters/stakeholders in regard to introduction of GM crops;
- (c) if so, the details thereof and the reaction of the Government thereto;
- (d) whether the objectives of the cultivation of these crops have been achieved and if so, the details thereof along with the extent of benefits accrued to the farmers; and
- (e) the preventive measures taken/proposed to be taken by the Government to check its harmful impact on human health?

Answer

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FOOD PROCESSING INDUSTRIES (SHRI TARIQ ANWAR)

- (a): Bt Cotton is the only Genetically Modified (GM) crops that has been introduced for commercial cultivation in the country.
- (b) & (c): Since inception of Bt. Cotton, there have been objections from some of the Non-Governmental Organizations besides Civil Society on Agriculture, etc., on the grounds that (i) Biosafety assessment of Bt Cotton before its introduction and post release monitoring of Bt cotton is not adequate; (ii) Bt cotton is not suitable for cultivation in rainfed areas, (iii) Cattle death and farmers' suicides have been attributed to introduction of Bt cotton in some regions such as Warangal and Vidarbha.

The objections have been very speculative, without any reasonable assessment of the technological strengths of Bt-cotton. In spite of the controversy regarding Bt cotton, the ground reality is that during the last decade, area under cotton cultivation (approx. 12 million hectares, of which 90% is under Bt cotton) and productivity of cotton has gone up significantly. During the post Bt cotton era, Indian economy has benefited as India is the Second largest exporter of cotton. There is no scientific evidence to show that Bt cotton has adversely impacted the biodiversity or human/cattle health.

(d): The main purpose of, Bt cotton was to control the dreaded insect pests, viz., bollworms to enhance yield and production of cotton in the country. Bt cotton effectively control bollworms, especially *Helicoverpa armigera*, thus preventing yield losses from an estimated damage of 30 to 60% each year in India. The biggest gain from the technology was in the form of reduced insecticide usage for bollworm control. Yields are estimated to have increased at least by 30% due to effective protection from bollworm damage.

(e): The Government of India is following a policy of case by case approval of genetically modified (GM) crops. Extensive evaluation and regulatory approval process takes place before any GM crop is approved for commercial cultivation. This includes generation of relevant biosafety information, its elaborate analysis to ensure food, feed and environmental safety. A final view on the commercialization of GM crop plants is taken only when there is a clear economic and technical justification besides suitability for environment and human consumption.