

**GOVERNMENT OF INDIA
ENVIRONMENT AND FORESTS
LOK SABHA**

STARRED QUESTION NO:360

ANSWERED ON:30.04.2012

COMMERCIALISATION OF GM CROPS

Adsul Shri Anandrao Vithoba;Yadav Shri Dharmendra

Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

- (a) whether the United Nations Organisation, Food and Agriculture Organisation, World Health Organisation (WHO) and European Union support the commercial use of Genetically Modified (GM) crops;
- (b) if so, the reaction of the Government thereto;
- (c) whether the Government proposes to consider and allow the commercial use of GM crops in India in view of the opinion of the international organisations;
- (d) whether the Government has conducted any study to ascertain the impact of GM crops on human health;
- (e) if so, the results thereof; and
- (f) the impact of introduction of these crops on use of pesticides?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS (SHRIMATI JAYANTHI NATARAJAN)

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

STATEMENT REFERRED TO IN THE REPLY TO PARTS (a) TO (f) OF THE LOK SABHA STARRED QUESTION NO. 360 BY SHRI ANANDRAO ADSUL AND SHRI DHARMENDRA YADAV REGARDING COMMERCIALISATION OF GM CROPS DUE FOR REPLY ON 30.04.2012

(a) Food and Agriculture Organisation (FAO) and World Health Organisation (WHO) are of the view that development of Genetically Modified (GM) crops offer the potential for increased agricultural productivity and improved nutritional value that can contribute directly to enhancing food security and human health. Simultaneously, both FAO and WHO also acknowledges that the use of GMO may involve potential risk to human health and environment. Accordingly, they recommend that commercialization of GM crops needs to be regulated on the basis of biosafety measures. The Codex Alimentarius Commission (Codex) is the joint FAO/WHO body responsible for compiling the standards, codes of practices guidelines and recommendations that constitutes the international food code. Codex also covers the principles for human health risk analysis of GM foods.

European Union (EU) has established stringent legal framework for regulating GM food and feed in the EU. Currently, only GM food crop approved for cultivation in EU is Bt Maize expressing MON810 event for use as food and feed. GM potato called Amflora has also been approved for cultivation for industrial use. Spain is the largest producer of GM Maize in EU. While several countries in EU have taken a decision not to allow cultivation of GM food crops, import and sale of GM commodity as food and feed are permitted as per the EU regulation subject to labeling laws.

(b)& (c) The Government of India is following a policy of case by case assessment of GM crops under the 'Rules for (known as 'Rules, 1989') of the Environment (Protection) Act, 1986. Although international standards and guidelines are referred to while framing National standards and guidelines, the decision to allow commercialization of GM crops in the country is based on extensive safety assessment studies and rigorous regulatory appraisal process conducted at the national level and is not influenced by the opinion of the international organizations;

(d) & (e) Bt cotton is the only GM crop approved for commercialization on the basis of extensive biosafety evaluation which includes environmental safety assessment as well as food and feed safety. The environmental safety assessment includes studies on pollen escape, out-crossing, aggressiveness and weediness, effect of the gene on non-target organisms, presence of the protein in soil and its effect on soil micro-flora, confirmation of the absence of Terminator Gene and baseline susceptibility studies. The food and feed safety assessment studies include composition analysis; allergenicity and toxicological studies; and feeding studies on fish, chicken, cows and buffaloes. In case the transgenic crop is found to be not suitable for human consumption or the environment, the product is rejected during the trial stage itself.

(f) The impact of introduction of Bt cotton on the use of pesticide is that, there has been reduction in the use of insecticide resulting in reduction of cost of inputs and high return in cotton cultivation. There has been a reduction in Insecticide usage in India from Rs.718 crores in 2004 for cotton Lepidoptera caterpillar to Rs.110 crores, with only Rs.23 crores for the control of American Bollworm in

