

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

UNSTARRED QUESTION NO:1059
ANSWERED ON:28.11.2011
EFFECT OF GM CROPS ON HUMANS
Chitthan Shri N.S.V.

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

- (a) whether the Genetically Modified (GM) crops (foodgrains, vegetables and fruits, etc.) may prove a threat to human generation as reported by various scientific communities in the country;
- (b) if so, the details thereof;
- (c) whether any study has been done by the Government in this regard;
- (d) if so, the details and outcome thereof; and
- (e) if not, the reasons therefor and the steps taken by the Government in this regard ?

Answer

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

(a) to (e) The Government of India is following a policy of case by case assessment of genetically modified (GM) crops. In view of various concerns related to the safety, efficacy and agronomic performance of transgenic seeds, extensive evaluation and regulatory approval process takes place before any GM plant is approved for commercial cultivation. This includes generation of relevant biosafety information and its elaborate analysis to ensure food, feed and environmental 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 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 studies include assessment on composition analysis, allergenicity and toxicological studies and feeding studies on fish, chicken, cows and buffaloes. In case, the transgenic crop is not found suitable for release in the environment or human consumption, the product is rejected during the trial stage itself. A final view on the commercialization of GM plants is taken only when there is a clear economic and technical justification for release of the product. Bt cotton, a non-food crop is the only transgenic crop approved for commercial cultivation in India.