GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:4475
ANSWERED ON:25.04.2005
DEVELOPMENT OF BIO TECHNOLOGY IN AGRICULTURE
Ramadass Prof. M

Will the Minister of AGRICULTURE be pleased to state:

(a) the measures taken to develop bio technology in the country as a measure of holistic agricultural development in the country;

(b) whether the apprehension expressed about the negative effects of bio technology are true;

(c) if so, the details thereof;

(d) the salient features of International Rice Genome Sequencing Project; and

(e) the benefits have been reaped by India as a global partner in this project?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE(SHRI KANTILAL BHURIA)

(a) The measures taken to develop biotechnology for holistic agricultural development include supporting the biotechnology related research activities mainly by the Department of Biotechnology (DBT) and Indian Council of Agricultural Research (ICAR) in the areas of transgenic development, diagnostics, resistance to stresses, quality of products, edible vaccines, and molecular breeding. A mechanism for environmental and biosafety evaluation and release of GM crops for cultivation and use has been put in place under the Environment Protection Act 1986.

(b) & (c):The Department of Biotechnology has developed an elaborate regulatory mechanism for the health and environment risk analysis of the biotechnology products before they are released. There is no scientific evidence about the negative effects of released biotech crops.

(d) The International Rice Genome Sequencing Project (IRGSP) is a consortium of publicly funded laboratories from ten countries including Japan, the United States of America, China, Taiwan, Korea, India, Thailand, France, Brazil, and the United Kingdom. The complete rice genome sequence of the IRGSP is in public domain and is serving as a free global resource for rapid discovery of genes and marker for crop improvement by scientists worldwide.

(e) Through the participation in IRGSP, the following benefits have been reaped so far by India :

1. Development of world class genome sequencing facilities
2. Trained human resource in the frontier area of genomics
3. A database of rice genes (Vanshanu Dhan) has been developed for rice researchers
4. Several DNA markers have been identified for improving quality traits and salinity tolerance
5. The first disease resistance gene has been isolated for rice Blast disease