

**GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA**

UNSTARRED QUESTION NO:809

ANSWERED ON:27.11.2012

BIO-TECHNOLOGY IN AGRICULTURE

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Will the Minister of AGRICULTURE be pleased to state:

- (a) whether the Government has taken any steps to encourage the farmers for employing modern techniques and methods to boost farm productivity in the country;
- (b) if so, the details and the outcome thereof;
- (c) whether the Government has also undertaken research and development in bio-technology for improving agricultural productivity;
- (d) if so, the details thereof; and
- (e) the steps taken/being taken by the Government to encourage the same in the farm sector for the benefit of farmers, including small and marginal farmers?

Answer

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

(a): Yes, Madam.

(b): In order to encourage the farmers to employ modern techniques and methods like quality seeds, fertilizers, pesticides and improved machinery & tools, the Government has been laying special emphasis on relevant & timely dissemination of information and appropriate technologies to the farmers through schemes like Extension Reforms, Mass Media Support to Agricultural Extension, Kisan Call Centres, Agri-Clinics and Agri-Business Centres. Other programmatic interventions of the Government in agriculture and allied sectors have provision regarding financial assistance to individuals & groups of farmers and agricultural extension.

The Indian Council of Agricultural Research has established a network of 630 Krishi Vigyan Kendras (KVKs) at district level in the country to bridge the gap between the technology developed at the research institutes and to facilitate the efforts of the main extension system. Krishi Vigyan Kendras provide technical backstopping for refinement and demonstration of various modern technologies and methods suitable for the area.

As per the 4th Advance estimate 2011-12, total food grain production in the country has reached a record level of 257.44 million tonnes.

(c): Yes, Madam.

(d): The major areas of biotechnological research include insect resistance in rice, maize, brinjal, cotton, chickpea, pigeonpea, sorghum, sugarcane, cabbage, cauliflower and tomato; disease resistance in potato, cotton, watermelon, tomato, papaya and groundnut; drought tolerance in rice, sorghum, chickpea & groundnut; aroma / grain length / salt tolerance / grain filling in rice; herbicide tolerance in maize and cotton; protein quality improvement and cold induced sweetening in potato; male sterile line for rice and mustard; molecular diagnostic kits and vaccine for livestock and poultry diseases; development of nutraceuticals & functional foods, cloning of embryos and stem cell research.

(e): The Department of Agriculture and Cooperation is implementing a Central Sector Scheme 'Development and Strengthening of Infrastructure Facilities for Production and Distribution of Quality Seeds' which includes financial assistance for use of biotechnology in agriculture. Under this Scheme, capacity building and training of manpower for upgradation of post release monitoring, quality control of genetically modified seeds/crops and awareness campaigns benefitting farmers including small & marginal farmers are being supported by the Government.