GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

LOK SABHA
UNSTARRED QUESTION NO. 321
TO BE ANSWERED ON 19/07/2016

INVESTMENT ON RESEARCH AND DEVELOPMENT

321. SHRI SHIVKUMAR UDASI:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

(a) the current status of agriculture development in the country;

(b) whether the amount of investment on research and development in agriculture sector is not adequate and if so, the details thereof;

(c) the details of the funds allocated for and spent on agricultural research in the country during the last three years and the current year, State and year-wise;

(d) whether the Government has stressed on the need for more research in the agriculture sector and if so, the details thereof; and

(e) whether the Government proposes to increase the allocation of funds for research and development in agriculture and if so, the details thereof?

A N S W E R

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE
कृषि एवं किसान कल्याण मंत्रालय में राज्य मंत्री
(SHRI SUDARSHAN BHAGAT)

(a) The agricultural research needs of the country are being catered through National Agricultural Research System (NARS) which comprise Indian Council of Agricultural Research (ICAR), Central Agricultural Universities, State Agricultural Universities and Central/ State Universities having agriculture faculty.

Indian Council of Agricultural Research (ICAR) through its 101 institutes/ deemed universities and 79 All India Coordinated Research Projects (AICRPs) is engaged in conducting basic and applied research to cater the needs of farmers across the country.

The NARS has developed 261 varieties of field crops and provided 2.3 lakh quintal breeder seeds during last three years (2012-13 to 2014-15). During 2016, another 164 varieties of field crops have been notified. Early maturing and thermo-tolerant crop varieties with higher nutrient and water use efficiency for newer niches and cropping systems have been developed and released for cultivation. The NARS in association with Department of Agriculture, Cooperation & Farmers Welfare (DoAC&FW) made available 347.31, 351.77 and 343.52 lakh quintals of certified/ quality seeds during 2013-14, 2014-15 and 2015-16, respectively, to the farmers. Moreover, India is currently producing more than 283 million tonnes of horticulture produce from an area of 24.3 million ha. Over the last decade, the area under horticulture has risen by 3.8 % per annum and production by 7.6 % per annum. Cost effective novel cane node technology and quality tissue culture seedling material in sugarcane, high density planting in cotton, quality seed production and microbial retting in jute, broad bed furrow planting technology in soybean, direct seeded rice and resource conservation technologies in wheat have been developed and demonstrated. Molecular markers for cultivar identification in cotton, rice, sorghum, pearl millet, wheat, maize, *mungbean*, and *urdbean* were developed. The genomes of two important pulse crops of India viz. chickpea and pigeonpea and cereal crop wheat have been successfully decoded. By adopting a path of science-led growth of its agriculture, India reaped dividends in the form of a strong, self-reliant and resilient food security situation. The spectacular achievements in the agricultural sector are attributable in large measure to technology-led improvements in agricultural productivity and investments in R & D in agriculture & allied sectors and effective pursuit of improved technologies by farmers. Several pest management practices involving eco-friendly biological control methods like pheromones and release of parasites and predators are being used for pesticide free harvest by the farming community. Also cotton ginning sector is modernised through Technology Mission on Cotton (Mini Mission IV) and as a result, the country is able to produce cotton bales with a low trash content (less than 3 per cent trash).

For delivering the benefits of research to the farmers, the Indian Council of Agricultural Research (ICAR) has established a network of 645 Krishi Vigyan Kendras (KVKs) in the country. Through this network the technologies/ products being evolved are demonstrated by organizing various extension programmes like farmers fair, Krishi Mahotsav, exhibitions, exposure visits, animal check-up camps and diagnostic and advisory services for soil, water and infected plant samples and also training of farmers to update their knowledge and skill. These programmes have also benefited the farmers in terms of increased crop production and improved farm income.

(b) The total plan outlay of Indian Council of Agricultural Research (ICAR) was Rs.12023.00 crore during XI Five Year Plan, which was 0.56% of the plan outlay of the country. The same was raised to Rs.25553.00 crore in the XII Five Year Plan which was 0.70% of the total plan outlay of the country.

(c) The funds are allocated sector wise and not on state-wise. The details of funds allocated for Agricultural Research during last three years and spent are given below:

2013-14 : RE – 2600 crore Expenditure : 2469.17 crore

2014-15 : RE – 2500 crore Expenditure : 2268.57 crore

2015-16 : RE – 3000 crore Expenditure : 2900.80 crore

2016-17 : BE – 3700 crore

(d) Various novel and cutting edge science-based research programmes are being pursued besides up-scaling the already developed technologies for maximizing the returns in agriculture for overall development of the country. The research programmes are being prioritized to develop new high yielding pest resistant varieties of food crops, pulses, fodder and commercial crop varieties. New research Institutes/ programs have basic, strategic and applied research related to crop improvement, crop production, crop protection, post-harvest operations, value addition, etc. ICAR's proposal for XII plan envisions a scenario of judiciously integrating conventional plant breeding, molecular biology, bioinformatics, genetic engineering, human resource and infrastructural development.

(e) ICAR seeks for enhanced allocations to the extent of 1% of agricultural GDP in forthcoming financial years so that agriculture research does not suffer due to paucity of funds.

****