

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

LOK SABHA
STARRED QUESTION NO. 40
TO BE ANSWERED ON 20TH JULY, 2021

ROLE OF AGRICULTURAL RESEARCH

***40.** SHRI GAJANAN KIRTIKAR:
SHRI GAUTHAM SIGAMANI PON:

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

- (a) the role of agricultural research in the development of the agricultural sector in the country;
- (b) whether the Government provides information to farmers regarding new scientific research taking place in the agricultural sector;
- (c) if so, the details thereof and the achievement made so far;
- (d) whether the Government encourages farmers to use scientific equipment for agricultural purposes;
- (e) if so, the details of the steps taken in this direction;
- (f) whether the Government also provides loans to farmers at cheaper rates for procuring such equipment besides subsidy; and
- (g) if so, the number of farmers benefited by the subsidy/loan in various States including Tamil Nadu and Maharashtra during the last three years and the current year?

ANSWER

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि और किसान कल्याण मंत्री

(SHRI NARENDRA SINGH TOMAR)

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

**STATEMENT IN RESPECT OF PARTS (a) to (g) OF LOK SABHA STARRED
QUESTION NO. 40 TO BE ANSWERED ON 20TH JULY, 2021 REGARDING
“ROLE OF AGRICULTURAL RESEARCH”**

(a) The agricultural Research Plays a very important role in the development of Agriculture Sector. In this regard, Indian Council of Agricultural Research (ICAR) has adopted a multipronged strategy to address the needs of the agriculture sector for its development. The new high yielding and biotic/abiotic stress tolerant varieties and technologies of crops, breeds/ strains of livestock & poultry developed by National Agricultural Research System (NARS) under Indian Council of Agricultural Research (ICAR) have played pivotal role in increasing the food and nutritional security of country. ICAR/NARS has developed more than 5500 varieties of different field and horticultural crops since 1969. During last 7 years (2014 to Jan 2021) alone, 1575 varieties of 70 field crops were developed which include 770 of cereals, 235 of oilseeds, 236 of pulses, 170 of fibre crops, 104 of forage crops, 52 of sugarcane and 8 of other crops. In addition, 288 varieties of horticultural crops were also released and notified during this period. Against the indented quantity of 6.59 lakh quintals of breeder's seed of different varieties received during the last 7 years, ICAR/NARS produced and supplied 8.20 lakh quintals. In livestock, 12 improved poultry varieties suitable for backyard poultry rearing, 9 high producing varieties of pigs and an improved sheep variety were developed. Twelve cloned buffaloes were also produced during the last 7 years to multiply superior germplasm. To augment the fish production, fish breeding and seed production technologies were developed for 25 species of food fishes and 48 species of ornamental fishes were identified during 2014-21. For better health management a total of 47 and 25 new vaccines/diagnostic kits were also developed in case of livestock & fish respectively.

Owing to the varieties and technologies developed and promoted by ICAR/NARS and the enabling policies of the Government, the country has seen 6 folds increase in the annual production of total food grains since 1950-51. The corresponding increase in the production of pulses, oilseeds, milk & fish was 3.04, 7.10, 11.04 and 17.90 folds respectively. The increase in productivity (kg/ha) of all food grains, rice, wheat, sugarcane, pulses and oilseeds during the period 1950-51 to 2018-19 has been 4.04, 3.98, 5.30, 2.34, 2.83 and 2.63 folds respectively. The percent increase in productivity (kg/ha) of all food grains, rice, wheat, sugarcane, pulses, oilseeds, milk and fish production during the period 2013-14 up to 2018-19 is, 7.78, 9.10, 10.32, 12.12, 9.90, 5.20, 7.70 respectively. The milk and fish production during the period 2013-14 up to 2019-20 has seen increase of 30.59 and 32.53 percent respectively.

In value terms, the total contribution of the agriculture & allied sector has increased from about Rs.1609198 crores during 2013-14 to Rs. 2040079 crores during 2020-21 reflecting an increase of 26.8 percent. The total agricultural exports have also shown continuous rise and the total value of the export of agricultural and allied commodities during the period 2013-14 and 2020-21 was Rs.262778.52 crores and Rs.310338.47 crores respectively showing an increase of 18.1 percent.

(b) & (c): The Government has set up 725 Krishi Vigyan Kendras (KVKs) in the Country to provide information to the farmers regarding new technologies in agriculture sector. The activities of KVKs include On-farm testing to identify the location specificity of technology under various farming systems; Frontline demonstration to establish the production potential of improved agricultural technologies on the farmers' fields; Capacity development of farmers for knowledge and skill up gradation; providing farm advisories using ICT and other media means on varied subjects of interest to farmers; and production of quality seeds, planting materials and other technology inputs for availability to the farmers. To develop awareness about improved agricultural technology among the farmers, a wide range of extension activities is undertaken by the KVKs. The details of such activities undertaken during 2007-14 and 2014-21 are given as **Annexure-I**.

(d) & (e): During last 7 years, the research Institutes under DARE/ICAR have developed 230 farm machinery/ implements and 168 processes/ protocols for the value-added products from agricultural produce with the aim of increasing mechanisation, reducing drudgery, improving efficiency of operation, reducing post-harvest losses and increasing the income of farmers. The farmers have been encouraged to use these equipments through Government schemes. Government of India has introduced a special dedicated scheme 'Sub Mission on Agricultural Mechanization (SMAM)' in 2014-15. As part of this scheme, a total of 15390 custom hiring centres 362 high tech hubs, 14235 farm machinery banks have been established during the last 7 years and the current year. The total number of farm machinery distributed among farmers during this period under subsidy is 13,21,968. Funds to the tune of Rs.930.1 crores, Rs.1044.57crores, Rs.1050.34 crores and Rs.1086.66 crores have been released under SWAN in 2018-19, 2019-20, 2020-2021 and 2021-22 (up to June 2021) respectively.

To address air pollution and to subsidize machinery required for in-situ management of crop residue, a Central Sector Scheme (100% funded by the Central Government) on 'Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue (CRM)' has been implemented from 2018-19 in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi. Under this scheme, the number of machines delivered to the individual farmers and custom hiring centres during the last 3 years is 158135. Under this scheme the total number of custom hiring centres established by the Government is 30961. Funds to the tune of Rs.584.33 Crores, Rs.594.23 Crores, Rs.570.70 Crores and Rs.700.00 Crores have been released under CRM in 2018-19, 2019-20, 2020-2021 and 2021-22 (up to June 2021) respectively. Since 2018-19, the Government has also been providing support to 60 KVKs of Punjab, Haryana, Uttar Pradesh and NCT of Delhi through a Central Sector Scheme on "Promotion of Agricultural Mechanization" to encourage farmers through training and demonstration on use of new farm machineries and implements for In-Situ Crop Residue Management.

(f) & (g): The Interest Subvention Scheme (ISS), **a Central Sector Scheme, 100% funded by Government of India**, was launched in the year 2006-07 with a view to provide concessional short term Agri-loans to the farmers. Under this Scheme for extending short term loans to the farmers, there is a provision to allow upto 15 percent of the loan towards the maintenance of the farm equipment. The benefits of ISS have also been extended to farmers in allied activities like Animal Husbandry and Fisheries to

existing KCC holders within the overall limit of Rs.3.00 lakh and issue of new KCC for Animal Husbandry and Fisheries farmers with provision of benefit of Interest Subvention & Prompt Repayment Incentive (IS&PRI) for loan amount up to Rs.2.00 lakh per annum. The implementing agencies for settling the claims under Interest Subvention Scheme are Reserve Bank of India (RBI)/National Bank for Agriculture and Rural development (NABARD) to which funds are released for further disbursement to banks/RRBs/Cooperatives. There is no state-wise allocation/release under the ISS. Year wise funds released under ISS are Rs.11495.67 crores, Rs.16218.75 crores, Rs.17789.72 crores and Rs.3000.00 crores during 2018-19, 2019-20, 2020-2021 and 2021-22 (as on date) respectively.

ANNEXURE-I
[Part (b) & (c) of Lok Sabha S.Q.No.40 for 20/07/2021]

Details of the technology transfer related activities undertaken by the KVKs during 2007-14 and 2014-21.

S.No.	Activities	2007-14	2014-21
1.	No. of On Farm Trials & On Field Technology Demonstrations (No. in lakh)	9.83	14.29
2.	No. of Farmers and extension workers trained (in lakh)	104.83	109.55
3.	Participants in extension activities (in lakh)	796.31	1265.58
4.	Seed produced (in lakh quintal)	13.22	15.86
5.	Planting material produced & distributed (in lakh)	1077.64	2862.44
6.	Livestock strains and fingerlings produced and provided (in lakh)	873.86	1631.01
7.	Soil samples tested (in lakh)	15.52	39.2
8.	Mobile agro- advisory provided to farmers (Messages in lakh)	41.49	9142.94
