

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

LOK SABHA
STARRED QUESTION NO. 192
TO BE ANSWERED ON 15th MARCH, 2022

USE OF TECHNOLOGY AND INNOVATION IN FARMING SECTOR

***192. SHRIMATI APARAJITA SARANGI:**
MS. LOCKET CHATTERJEE:

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

- (a) whether the Government has taken some measures to encourage the use of technology and innovation in the farming sector in the country and if so, the details thereof throughout the country and specially in Odisha;
- (b) the measures taken by the Government to incentivize make in India innovation in farming technology;
- (c) the details of the grants given by the Government for farming related technology and the disbursement thereof;
- (d) the details of the technology in current use and the amount of subsidy given by the Government for adoption of new technology by the farmers especially to small farmers;
- (e) the measures taken by the Government to spread awareness and ensure last-mile delivery of technology/ innovations to the farmers; and
- (f) the details regarding the point of view of the Government in encouraging the use of various innovation in the agricultural technology sector which would benefit the agriculture output and could increase the farmer's efficiency and income?

ANSWER

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE
कृषि और किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

(a) to (f): A statement is laid on the Table of the House.

STATEMENT IN RESPECT OF PARTS (a) TO (f) OF LOK SABHA STARRED QUESTION NO. *192 TO BE ANSWERED ON 15th MARCH, 2022 REGARDING “USE OF TECHNOLOGY AND INNOVATION IN FARMING SECTOR”

(a) Government encourages the use of technology and innovation in the farming sector in the country including the State of Odisha through various schemes such as Rastriya Krishi Vikas Yojana (RKVY), Promotion of Agriculture Mechanisation for in-situ Management of Crop Residue, National Mission for Sustainable Agriculture (NMSA), Pradhan Mantri Krishi Sinchai Yojana (PMKSY) etc.

(b) To promote make in India innovation in farming technology, the Government promotes startups in agriculture sector. To nurture agri-entrepreneurs 50 Agri Business Incubators have been established in different ICAR Institutes and Agricultural Universities. So far, a total of 1617 Start-ups including 818 by DARE/ ICAR and 799 by DA&FW have been developed so far. Hackathons are also organised involving Students/ Scientists/ Entrepreneurs and Innovators to encourage development of agricultural technologies and innovations. As part of Make in India initiative, ICAR Institutes developed 117 new machines/ equipments during last 7 years. A total **13,78,755** farm machines prototypes have been provided to farmers during 2014-21. The cost effective and energy efficient improved equipment has resulted in saving of costly inputs (seeds, fertilizers, fuel, chemicals, water, electricity) up to 20-40% ensuring higher productivity and reduced losses.

(c) The Government supports farmers for adopting farming related technologies under various schemes. Most of the schemes are implemented through the respective State Governments. The total funds allocated for 18 major Agricultural Technology related schemes during 2020-21 was 11329.31 crores and the expenditure was 10758.30 crores. Additionally, for promoting technologies like Artificial Intelligence, Block Chain, Remote sensing and GIS, use of drones and robots etc under National e-Governance plan, Government provided funding support to the tune of Rs. 4179.0 crores to the States during 2020-21 and 2021-22 which included funding support of Rs. 343.15 crores to the Government of Odisha.

(d) The technology in use include high yielding, stress tolerant, nutrient fortified and/or processable varieties of field and horticultural crops, improved breeding, feeding and health management technologies in livestock, poultry and fisheries sector. At present, a total of 1330 field crop varieties are indented by States and total of 1.15 lakh quintals of breeder seeds is produced and supplied every year. Micro irrigation has been adopted by the farming community of the country on a large scale and a total of 12.5 million ha has been brought under micro irrigation in the country till date. Government provides subsidy for the adoption of new varieties/ technologies under various schemes. The amount of subsidy varies from Scheme to Scheme. In the scheme for Promotion of Agricultural Mechanization for in-situ Management of Crop Residue, a subsidy of 50% was given to the individuals and 80% for community purchase of related farm machinery. Subsidy for the establishment of sprinkler system is 75% and that for construction of polyhouse through State Governments is 50%. For construction of plastic lined pond, Government gives 50% subsidy.

(e) Krishi Vigyan Kendras (KVKs) and Agricultural Technological Management Agency (ATMA) at district level undertake training, demonstrations, exhibitions and skill development

programs etc. provide information to the farmers, farm women, and rural youth. During 2014-2021, 91.43 crores advisories were provided to the farmers by KVK's, a total of 100.05 lakhs farmer and 9.50 lakhs extension personnels were trained by KVKs. Besides 2.44 lakhs on farm trials of new improved technologies were conducted at farmers field by KVKs. A total 34.06 lakh technology demonstrations were also organised by Agricultural Technology Management Agency (ATMA) during the last 7 years. State Agricultural Universities (SAUs) and ICAR Institutes are also involved in the transfer of new technology. Mass media and ICT based tools like mobile SMS, Videos, Mobile Apps etc. are also used to provide information to farmers on large scale. Kisan Call Centre, Agri-clinics and Agribusiness management centers, DD Kisan channel, M-kisan, Farmers portal established by the Government also disseminate the latest information to the farmers.

(f) Government is actively encouraging and promoting various innovations in the Agriculture sector through different schemes/programs like digital agriculture mission, Kisan Drones, E-NAM, Agri-startups, mechanization, solar pumps, micro-irrigation, bio-fortification etc. The input efficient technology like use of laser guided land leveller for increasing water use efficiency, roto-till-drill and zero till drill for sowing wheat under no tillage conditions, Broad-bed-furrow seeder for farming broad bed and seeding on bed, ridge-furrow seeder for sowing soybean on ridges etc. have increased farmers efficiency and income. To encourage sustainable development and reducing input costs, natural farming is promoted in the country through Research Institutes, Agricultural Universities and Krishi Vigyan Kendras.
