

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

LOK SABHA
UNSTARRED QUESTION No. 5317
TO BE ANSWERED ON 05th APRIL, 2022

AGRI-FINTECH COMPANIES

5317. SHRI MANOJ TIWARI:

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

- (a) whether the Government has any proposal to promote Agri-fintech companies in the near future;
- (b) if so, the details thereof;
- (c) If not, the reasons therefor; and
- (d) whether any efforts have been made to introduce new technologies in the Agriculture sector?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

(a) to (c): The Department has constituted a High Level Task Force, which is in the process of finalizing "India Digital Ecosystem of Agriculture (IDEA) report. Task Force invited comments from subject experts, farmers, Farmer Producer Organizations (FPOs) and general public and considered them. Based on this, the Department is in the process of finalizing a framework for creating Agristack in the country, which will serve as a foundation to build innovative agri-focused solutions leveraging digital technologies to contribute effectively towards increasing the income of farmers and improve efficiency of the Agriculture sector in the country. Once finalized, this can serve as a foundation to build innovative agri-focused solutions leveraging technologies to contribute effectively towards increasing the income of farmers and improve farm efficiency/efficiency of the Agriculture sector in the country.

In this regard, leading Technology/Agri-tech/Start-Ups companies were identified and invited to collaborate with the Government of India and develop Proof of Concepts (PoC) based on data of select Districts/ Villages. A public call through the Department's website was issued inviting proposals for Memorandum of Understanding (MoU). Companies were invited to sign MoU on purely pro bono basis and develop the PoCs. These PoCs will help in understanding the uses of Agristack and service & solutions that can be built using available data and some of them, if found beneficial to the farmers will be scaled up at National level. In this regard, the Government has signed MoU with leading Technology/Agri-tech Players & Start-ups for working on Proof of Concepts (PoCs) in the select Districts/Villages.

(d): Several initiatives have been taken to introduce new technologies in the Agriculture sector. A list of the same is attached at **Annexure**.

Annexure

Initiatives undertaken by the Government to introduce new technologies in the Agriculture sector:

Government encourages the use of technology and innovation in the agriculture sector in the country through various schemes such as National e-Governance Plan in Agriculture (NeGPA), Sub Mission on Agriculture Mechanization (SMAM), 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), PMFBY, ATMA Scheme, Technology Mission on Coconut (TMO) etc. The details of the some of the activities for the use of technology under the various scheme is as under:

- i. The Department has constituted a high level Task Force, which is in the process of finalizing a report on India Digital Ecosystem of Agriculture (IDEA) which would lay down the architecture of Digital AgriStack with unique ID for farmers, and standards for interoperability between various data streams in the Agristack. This would open up possibilities for developing services and solutions.
- ii. 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.
- iii. 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 were 11329.31 crores and the expenditure was 10758.30 crores.
- iv. For promoting new technologies under National e-Governance plan, Government provided funding support to the tune of Rs. 30 crores to the States during 2020-21 and 2021-22.

- v. 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.
- vi. 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 personnel 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 organized 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.
- vii. 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 leveler 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.

- viii. Sub Mission on Agricultural Mechanization (SMAM) is being implemented w.e.f April,2014 through States/UTS Governments. The scheme aims at 'reaching the unreached' by bringing to the small and marginal farmers in the core and giving the benefits of farm mechanization, by Promoting 'Custom Hiring Centers' , creating hubs for hi-tech & high value farm equipments, distribution of various agricultural equipments, creating awareness among stakeholders through demonstration and capacity building activities, and ensuring performance testing and certification at designated testing centers located all over the country.
- ix. A special Scheme to support the efforts of the Governments of Haryana, Punjab, Uttar Pradesh and the NCT of Delhi to address air pollution due to stubble burning and to subsidize machinery for the farmers for in-situ management of crop residue, a new Central Sector Scheme on 'Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi (CRM) has been introduced wef 2018-19.
- x. The Coconut Development Board implements 'Technology Mission on Coconut' (TMOB) from the year 2001-02, which envisages development of technologies for management of insect pests and disease affected gardens, product diversification and market promotion, its demonstration and promotion for adoption, in coconut sector, excluding coir. The Board also implements a scheme 'Technology Demonstration & Quality Testing laboratory' under which CDB Institute of Technology (CIT) involves in product development, quality testing and imparting trainings on various coconut based products.
- xi. Pradhan Mantri Fasal Bima Yojana (PMFBY)/Restructured Weather Based Crop Insurance Scheme (RWBCIS): - The scheme was introduced in the country for implementation from 2016-17. The scheme is a multi-stakeholder in terms of implementation. Proper implementation and management of the Scheme requires innovative technology interventions, adoption of IT based new monitoring methods, extensive specially to facilitate the States to do regular evaluation. To bring more transparency use of technology including Remote Sensing Technology, Smartphones, Drones, crop insurance apps for reporting estimation of crop losses to ensure early settlement of claims has also been utilized in implementation of the scheme. There is a centralized web-based integrated digital platform namely National Crop Insurance Portal (NCIP) used to speed up service delivery, unify fragmented databases, achieve a single view of data, eliminate manual processes and subsequently provide faster insurance services to farmers. For better transparency of yield calculation process, CCE Agri app has been developed to make the entire process paperless and real-time. All data captured through the app is time-stamped and geo-tagged.
