

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

RAJYA SABHA
UNSTARRED QUESTION NO. 3371
TO BE ANSWERED ON 31/03/2023

AWARENESS ABOUT FARMING TECHNOLOGY

3371. SHRI VIJAY PAL SINGH TOMAR:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) Whether Government has taken any steps to spread awareness among the farmers about integrating modern agricultural technology in farming;
- (b) If so, the details thereof and if not, the reasons therefor;
- (c) Whether Government has conducted any study highlighting the benefits of digitalisation of agriculture to increase productivity and cut losses; and
- (d) If so, the details thereof and if not, the reasons therefor?

ANSWER

MINISTER FOR AGRICULTURE AND FARMERS WELFARE
(SHRI NARENDRA SINGH TOMAR)

(a) & (b): Government has taken various initiatives to spread awareness among farmers about latest & modern agriculture technology in farming, which are given below:-

1. Agriculture Extension Division is implementing schemes with the objective to strengthen the agricultural extension machinery. The major Schemes and Programmes are as under:
 - i) Support to State Extension Programmes for Extension Reforms (ATMA) is a Centrally Sponsored scheme which aims to make available the latest & modern agricultural technologies in different thematic areas to increase agricultural production through extension activities viz. Farmers Training, Demonstrations, Exposure Visits, Kisan Mela, Mobilization of Farmers Groups and Setting up of Farm Schools.
 - ii) Mass Media Support to Agriculture Extension aims to create awareness/publicity of schemes/missions/ government new initiatives/ advisories /modern technologies related to agriculture and allied sector for the welfare of farming community through Electronic Media, Print Media & Social Media.
 - iii) The Kisan Call Centre (KCC) scheme aims to provide answer to farmers' queries on agriculture and allied sectors including latest and modern technologies through Toll Free Number - 1800-180-1551. The replies to the queries of the farming community are given in 22 local languages from 17 locations across the country.
 - iv) Agri-Clinics and Agri-Business Centres (AC&ABC) Scheme aims to supplement the efforts of public extension through creating gainful self-employment opportunities for

unemployed candidates possessing qualification in agriculture and allied subjects for dissemination of information in latest & modern agricultural technologies.

- v) Four Extension Education Institutes (EEIs) established on regional basis at Nilokheri (Haryana); Hyderabad (Telangana); Anand (Gujarat) and Jorhat (Assam) to cater to the training needs of middle-level field extension functionaries working under agriculture and allied departments of States/UTs of respective regions to equip them with information on latest and modern technology for dissemination to the farmers.
- vi) Short duration Skill Training (7 days) of Rural Youth (STRY) scheme imparts short term skill training to rural youths and farmers on latest & modern technology on agriculture and allied areas. The National Institute of Agricultural Extension Management (MANAGE) is implementing STRY across the country through State Agricultural Management & Extension Training Institutes (SAMETIs), ATMA and Krishi Vigyan Kendras.
- vii) Diploma in Agricultural Extension Services for Input Dealers (DAESI) is of one year (expanded to 48 weeks) regular course with an objective to impart education in agriculture and other allied areas to the Input Dealers so that they can establish linkage to their business with extension services including information on latest & modern technology, besides discharging regulatory responsibilities enjoined on them.
- viii) Skill Training Courses in agriculture and allied areas of minimum of 200 hrs for rural youth and farmers are conducted through the wide network of training institutes to create a pool of skilled manpower and promote wage/self employment among rural youth and farmers.
- ix) The Extension Division is participating/supporting/organising the exhibition/ fairs/ seminars/ conference etc. at the different levels in the country for showcasing latest & modern technological advancements and dissemination of information to the farming community and also for promoting business opportunities in agriculture and allied sectors. The Division also supports five Regional Agricultural fairs – one in each Region every year.

2. Government has finalized the core concept of India Digital Ecosystem of Agriculture (IDEA) framework which would lay down the architecture for the federated farmers' database. Further, the databases related to the schemes governed by the Department have been integrated. The IDEA would serve as a foundation to build innovative agri-focused solutions leveraging emerging technologies to contribute effectively in creating a better Ecosystem for Agriculture in India. This Ecosystem would help the Government in effective planning towards increasing the income of farmers in particular and improving the efficiency of the Agriculture sector as a whole.

3. Under plan scheme viz. National e-Governance Plan in Agriculture (NeGP-A) wherein, funds are released to the State(s)/UT(s) for projects involving use of modern technologies viz.

Artificial Intelligence (AI), Machine Learning (ML), Robotics, Drones, Data Analytics, Block Chain etc.

4. Sub Mission on Agricultural Mechanization (SMAM) is being implemented w.e.f April,2014.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.

5. National Agriculture Market (e-NAM) is a pan-India electronic trading portal which networks the existing Agricultural Produce Market Committee (APMC) mandis to create a unified national market for agricultural commodities. Digital services are provided to traders, farmers, Farmers Producer Organizations (FPO), Mandis through various modules of e-NAM platform such as FPO trading module, warehouse based trading module.

6. Integrated Scheme for Agricultural Marketing schemes (AGMARKNET) to promote creation of agricultural marketing infrastructure by providing backend subsidy support to State, cooperative and private sector investments Services are provided through (AGMARKNET) portal which is a G2C e-governance portal that caters to the needs of various stakeholders such as farmers, industry, policy makers and academic institutions by providing agricultural marketing related information from a single window. It facilitates web- based information flow, of the daily arrivals and prices of commodities in the agricultural produce markets spread across the country.

7. Development of Kisan Suvidha mobile application to facilitate dissemination of information to farmers on the critical parameters viz., Weather; Market Prices; Plant Protection; Input Dealers (Seed, Pesticide, Fertilizer); Farm Machinery; Soil Health Card; Cold Storages & Godowns, Veterinary Centres and Diagnostic Labs. With market information, farmers are better informed about markets to sell produce, prevailing market prices and quantity demanded in the market. Thus, they can make informed decisions to sell produce at the right price and right time.

8. The Indian Council of Agriculture Research (ICAR) has also compiled more than 100 mobile apps developed by ICAR, State Agricultural Universities and Krishi Vigyan Kendras and uploaded on its website. These mobile apps developed in the areas of crops, horticulture, veterinary, dairy, poultry, fisheries, natural resources management and integrated subjects, offer valuable information to the farmers, including package of practices, market prices of various commodities, weather related information, advisory services, etc.

9. Agriculture Infrastructure Fund (AIF) is implemented for creating post harvest management infrastructure and community farming assets to help enhanced productivity and minimize post harvest losses. The primary processing centers and sorting and grading units established under the scheme is helping farmers to realize 20-25% better price for their produce. Custom Hiring Centers and projects of smart and precision farming infrastructure

established under the scheme is contributing towards pacing up the farm mechanization and technology adoption in agriculture sector and also helping in boosting productivity.

10. Government is providing advisory services on various crop related matter to the registered farmers through SMSs.

(c) & (d): The Committee on Doubling Farmers' Income (DFI) in its Report has appreciated the role of Digital Agricultural Technology, which can play a transformational role in modernizing and organizing how rural India performs its agricultural activities. Digital technologies are finding increasing use in the agricultural value system, and farmers are increasingly becoming more informed, as various measures are taken to provide them ready access to technology and information which have got a direct impact in enhancing productivity and minimize post harvest losses.
