

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

RAJYA SABHA
UNSTARRED QUESTION NO. 652
TO BE ANSWERED ON 08/12/2023

INCREASING THE USE OF DRONES IN AGRICULTURE SECTOR

652. SHRI RAVICHANDRA VADDIRAJU:

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

- (a) whether the Ministry has taken note of the fact that drone technology has become increasingly popular in the agriculture sector as it has a wide range of benefits including increasing efficiency, improved yields, and reduced costs and that adopting drone technology is inevitable;
- (b) if so, the details thereof;
- (c) whether it is a fact that farmers are reluctant to adopt drone technology due to fears of job loss; and
- (d) if so, the steps being taken by Government to remove misunderstandings and assuring them of providing concessions and subsidies for increased use of drones in agriculture sector?

ANSWER

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

(a) to (d): Use of drones in agriculture have distinct advantages like increased efficiency, cost effectiveness due to reduction in cost of spraying, saving of fertilizers and pesticides due to high degree of atomization, saving of water due to ultra-low volume spraying etc. besides reduction of human exposure to hazardous chemicals. The use of drones in agriculture also have catalytic effect in creating both direct as well as indirect employment in the agriculture sector.

Under Sub-Mission on Agricultural Mechanization (SMAM) financial assistance @ 100% of the cost of drone up to a maximum of Rs. 10 lakhs per drone is provided for its purchase and demonstration on the farmers' fields by the institutes under Indian Council of Agricultural Research (ICAR), Farm Machinery Training & Testing Institutes, Krishi Vigyan Kendras (KVKs), State Agriculture Universities (SAUs), State and other Central Government Agricultural Institutions/Departments and Public Sector Undertakings (PSUs) of Government of India engaged in agricultural activities. The Farmers Producers Organizations (FPOs) are provided grants up to 75% of the cost of Kisan Drone for its demonstrations on the farmers' fields. A contingency expenditure of Rs.6000 per hectare is provided to these implementing agencies that do not want to

purchase drones but will hire drones for demonstrations from Custom Hiring Centres (CHCs), Hi-tech Hubs, Drone Manufacturers and Start-Ups. The contingent expenditure to implementing agencies that purchase drones for drone demonstrations is limited to Rs.3000 per hectare. In order to make available drone services to farmers on rental basis, financial assistance @ 40% up to a maximum of Rs. 4.00 lakhs are provided for purchase of drones by CHCs under Cooperative Society of Farmers, FPOs and Rural entrepreneurs. Agriculture graduates establishing CHCs are eligible to receive financial assistance @ 50% of the cost of drone up to a maximum of Rs.5.00 lakhs per drone. For purchase of drones on individual ownership basis, the Small and Marginal, Scheduled Caste/Scheduled Tribe, Women and North Eastern State farmers are provided financial assistance @ 50% of the cost up to a maximum of Rs. 5.00 lakhs and other farmers @ 40% up to a maximum of Rs. 4.00 lakhs.

Under SMAM, funds amounting to Rs. 141.39 crores have been released towards Kisan Drone promotion which includes Rs. 52.50 crores released to the ICAR for purchase of Kisan Drones and organizing their demonstrations on the farmers' fields through 100 KVKs, 75 ICAR institutions and 25 SAUs. The funds have been provided to the State Governments for supply of 461 Kisan Drone to farmers on subsidy and establishment of 1585 Kisan Drone CHCs to provide drone services to the farmers. 263 Agri-Drones have been procured by 193 Institutions of ICAR across the country. 260 personnel from these institutions have undergone Drone Pilot Training. With a view to create awareness on the advantages of drone in agriculture, these Institutions have carried out 15,075 drone demonstrations on nutrients, fertilizers, chemicals (insect & pest) applications following Standard Operating Procedures (SOPs) covering 16,471 hectare area.

The Government has also recently approved Central Sector Scheme for providing drones to the Women Self Help Groups (SHGs) with an outlay of Rs. 1261 Crores. The scheme aims to provide drones to 15000 selected Women SHGs for providing rental services to farmers for agriculture purpose (application of fertilizers and pesticides). Of the total 15,000 drones, first 500 drones will be procured by Lead Fertilizer Companies (LFCs) in 2023-24, using their internal resources for distribution to selected SHGs. Remaining 14500 drones will be provided under this scheme during 2024-25 and 2025-26 and Central Financial Assistance @ 80% of the cost of drone and accessories/ancillary charges up to a maximum of Rs. 8.0 lakhs will be provided to the women SHGs for purchase of drones. The Cluster Level Federations (CLFs) of SHGs may raise the balance amount (total cost of procurement minus subsidy) as loan under National Agriculture Infra Financing Facility (AIF). Interest subvention @ 3% on the AIF loan will be provided to the CLFs. The scheme will help in infusing advance technology in agriculture for improved efficiency, enhanced crop yield and reduced cost of operation for the benefit of farmers. The scheme will also provide sustainable business and livelihood support to SHGs and they would be able to earn additional income of at least Rs. 1.0 lakhs per annum.
