F.No.3-4/2020-M&T(I&P) (81291) Government of India Ministry of Agriculture & Farmers Welfare (Department of Agriculture & Farmers welfare) (Mechanization & Technology Division)

> Krishi Bhawan, New Delhi Dated: 17<sup>th</sup> January 2022

#### OFFICE MEMORANDUM

## Subject: Providing agricultural services through drone application under Sub-Mission on Agricultural Mechanization (SMAM): Additional Guidelines - Regarding

The use of Drone technology has the potential to provide a sustainable solution in context of enhancing the productivity as well as efficiency of the Agriculture sector. Agriculture drone empowers the farmer to adapt to specific environments and make relevant choices in regulating crop health and crop treatments.

In view of above, the undersigned has been directed to communicate the following additional guidelines for providing agricultural services through drone application under Sub-Mission on Agricultural Mechanization (SMAM):

### 1. Drone Technology Demonstrations:

(a) Implementing Agencies: FMTTIs, ICAR institutions, KVKs, FPOs and SAUs.

### (b) Objectives of Demonstrations:

- (i) To conduct large scale demonstrations on cropping system based approach to promote use of drones in agriculture
- (ii) To Introduce improved/newly developed drone based agricultural practices in crop production/post-harvest management system
- (iii) Conduct demonstrations with participation of Custom Hiring Centres and with the partnership of drone manufacturers.

#### (c) Financial Assistance (Drone Demonstration):

- (i) Depending on the requirements, FMTTIs, ICAR institutions, KVKs and SAUs will be provided financial assistance (100 % grant in aid) for purchase of agricultural Drones and its attachments (actual cost of agricultural drone and its attachments or Rs. 10.00 lakhs, whichever is lower) for conducting demonstrations on the farmers' fields.
- (ii) FPOs will be provided 75% grant-in-aid for purchase of agricultural Drones and its attachments for conducting demonstrations on the farmers' fields.
- (iii) The proposals for purchase of Drones and its attachments will be submitted by the implementing agencies, and will be considered by the Executive Committee of the Scheme for allocation of funds
- (iv) The Implementing agencies which do not want to purchase the agricultural Drones for demonstration, will hire the Drones to be demonstrated from the Hi-tech Hubs/Manufacturers/Start-ups. In such cases, the Department will provide 100% assistance @ Rs. 6000 per hectare to meet contingency expenditure such as charges towards hiring of Drones/Drone Pilots, Expenditure towards hands on training and Miscellaneous expenditure such as expenditure towards transport, labour, publicity and printing of technical literature etc.
- (v) The rate of grant to meet the contingent expenditure will be Rs. 3000/- per hectare in the case of the implementing agencies that will be provided grants for purchase of agricultural Drones for demonstration.

(vi) The FPOs will submit their proposals for demonstration through the State Governments. The proposals of the ICAR institutions, KVKs and SAUs may be routed through Division of Agricultural Engineering, ICAR.

NOTE: Demonstration shall be conducted up to 31<sup>st</sup> March 2023. Financial Assistance for purchase of Drone for Demonstration will be applicable till 31<sup>st</sup> March 2023 and also the grants to meet contingent expenditure for demonstration shall be applicable till 31<sup>st</sup> March 2023 and only once in any field.

# 2. Financial Assistance for Establishment/Upgrading the Custom Hiring Centres (CHCs)/Hi-tech Hub for providing agricultural services through drone application:

## (a) Implementing Agencies: State Governments

**(b) Financial assistance:** @ 40% of the basic cost of agricultural drone and its attachments or Rs. 4.00 lakhs, whichever is less will be available to the existing CHCs/Hi-tech Hubs established by the Cooperative Societies of Farmers, FPOs and Rural entrepreneurs:

- (i) for upgrading their CHCs/Hi-tech Hubs for providing agricultural services through drone application.
- (ii) The new CHCs or the Hi-tech Hubs that will be established by the Cooperative Societies of Farmers, FPOs and Rural entrepreneurs with financial assistance from SMAM, RKVY or any other Schemes may also include Drone as one of the machines along with other agricultural machines in the projects of CHCs/Hi-tech Hubs.
- (iii) These CHCs/Hi-tech Hubs will also be eligible for availing finance under Agriculture Infrastructure Fund (AIF)
- (iv) The CHCs/Hi-tech Hubs upgraded/established for providing agricultural services through drone application will be supervised by the District Agriculture Officer for its operation so that hiring charges are reasonable and affordable to farmers.
- (v) Financial Assistance for Agriculture Graduate for establishment / Upgrading of Custom Hiring Centres /Hi-tech Hubs will be @ 50% of the basic cost of agricultural drone and its attachments or Rs. 5.00 lakhs, whichever is less.

**NOTE**: Rural entrepreneurs – Should have passed class tenth examination or its equivalent from a recognized Board; and having remote pilot license from Institute specified by the Director General of Civil Aviation(DGCA) or from any authorized remote pilot training organization.

## **3.** Necessary Compliances to be ensured by the Demonstrating Institutions and Providers of agricultural services through drone application:

- The drone operations are being permitted by Ministry of Civil Aviation (MoCA) and Director General of Civil Aviation (DGCA) through the conditional exemption route. MoCA has published 'Drone Rules 2021' vide GSR No. 589(E) dated 25th August 2021 to regulate the use and operation of Drones in India, which shall be complied for all Drone applications
- (ii) The Department of Agriculture & Farmers Welfare has also brought out Standard Operating Procedures (SOPs) for use of Drone application with pesticides for crop protection in agricultural, forestry, non-cropped areas, etc. and SOPs for Drone Application in Spraying for Soil and Crop Nutrients, which shall be adhered to by all the demonstrating institutions and all the providers of agricultural services through drone application. The SOPs are available at website https://farmech.gov.in/New\_Folder/SOPforDrone.pdf
- (iii) Guidelines of Ministry of Civil Aviation, CIB&RC shall be applicable to all drone users/operators/CHC service providers

The other Guidelines of SMAM will remain unchanged. The State Governments and all other implementing agencies are kindly requested to take necessary action in the matter and may publicize the above stated additional guidelines for the benefit of farmer's/service providers.

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Distribution:

- 1. All the State Governments
- 2. DDG (Extension)/DDG (Engg), ICAR
- 3. FMTTI, Budni (MP), Hisar (Haryana), Anantapur (AP) and Biswanath Chariali (Assam)
- 4. All the SAUs

Copy to:

- (i) PPS to Secretary, DA&FW
- (ii) PPS to AS (AL), DA&FW
- (iii) PPS to JS (M&T), DA&FW
- (iv) PPS to JS (AIF), DA&FW
- (v) ADC (Machinery), ADC (Crops), Director (RKVY), DC (M&T)- I&II, AC (M&T)-I&II, AE (M&T)