

F.No.3-4/2020-M&T(I&P) (Part1) (111895)
Government of India
Ministry of Agriculture & Farmers Welfare
(Department of Agriculture & Farmers welfare)
(Mechanization & Technology Division)

Krishi Bhawan, New Delhi
Dated: 23rd January 2023

To,

The Additional Chief Secretary (Agriculture)/Principal Secretary (Agriculture)/Director (Agriculture)/Nodal State Officers implementing Mechanization Schemes/Managing Director of All State Agro Industries Corporations

(All States)

Subject: Sub-Mission on Agricultural Mechanization (SMAM)- Clarifications/amendments in the Existing Guidelines

Madam/Sir,

The undersigned is directed to inform the following revisions/amendments in the existing guidelines of Sub-Mission on Agricultural Mechanization (SMAM)

(1) Apart from the existing beneficiaries, the **Self Help Groups (SHGs)** will also be eligible beneficiaries of the Custom Hiring Centres (CHCs)/Hi-Tech Hubs and Village Level Farm Machinery Banks (FMBs). From within the allocations made by the States towards CHCs/Hi-Tech Hubs and FMBs, an allocation of 10% of the funds shall be earmarked towards SHGs through State Rural Livelihood Mission (SRLM) and through Agriculture Department of the respective States.

(2) The Department vide OM No..3-4/2020-M&T(I&P) (81291) dated 17th January 2022 (copy enclosed) has issued certain guidelines for providing agricultural services through drone application under SMAM. Under **item (2) (Note)** of the said OM, it is stipulated that the rural entrepreneurs should have remote pilot license from Institutes specified by the Director General of Civil Aviation (DGCA) or from any authorized remote pilot training organization. **This requirement of remote pilot license may be treated as deleted as mandatory requirement for selection of beneficiaries for drone purchase.**

(3) Under **para 11.1.3 (IV)** of the existing guidelines of SMAM regarding testing of tools and equipments, the existing financial limit of **Rs. 35000/- has been revised to Rs. 50000/-**. The other guidelines for testing will remain unchanged.

(4) The additional equipments and machines as indicated in **Annexure-I** have been recommended for financial assistance under SMAM.

This is issued with the approval of competent authority of this Department.



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Copy to:

- 1) ADG (Engg.), ICAR, KAB-II, Pusa, New Delhi
- 2) Director, FMTTI, Budni/Hisar/Anantapur/Biswanath Chariali
- 3) HoDs of all the identified Testing Centres
- 4) President/Secretary, TMA, AMMA, PTMA, AICHMA

Additional Machines Recommended for Financial Assistance under SMAM

S. No.	Name of the machines	Maximum permissible financial assistance For SC/ST, small & marginal farmers , women, and NE States beneficiary		Maximum permissible financial assistance For other beneficiary	
		Rs. in Lakhs	Pattern of Assistance	Rs. in Lakhs	Pattern of Assistance
Agricultural Machines and Equipments					
1.	Tractor drawn Inclined Plate Planter with Pre-emergence herbicide strip applicator	0.50	50%	0.40	40%
2.	Tractor operated two row sugarcane settling planter	0.575	50%	0.46	40%
3.	Soil Plant Analysis Development (SPAD) meter	0.075	50%	0.06	40%
4.	Tractor operated check basin former	0.375	50%	0.30	40%
5.	Tractor operated seeder for mat type rice nursery	1.40	50%	1.12	40%
6.	Self-propelled maize harvester	0.75	50%	0.60	40%
7.	Power operated sugarcane sett cutter	0.37	50%	0.296	40%
8.	Pseudostem injector for banana	0.075	50%	0.060	40%
9.	Tractor operated EPN/ Bio agent applicator for sugarcane	0.225	50%	0.180	40%
10.	Tractor operated cassava harvester cum lifter	0.875	50%	0.70	40%
11.	Tractor operated banana bunch harvester	0.875	50%	0.70	40%
12.	Bullock cart mounted solar powered high clearance sprayer	0.40	50%	0.32	40%
13.	Bullock cart mounted air mist canopy sprayer	0.475	50%	0.38	40%
14.	Cattle dung collector	0.16	50%	0.128	40%
15.	Tractor Operated Lateral Laying Machine	0.40	50%	0.32	40%
16.	Solar Insect Trap	0.0375	50%	0.030	40%
17.	Electric Tiller/Weeder	0.63	50%	0.50	40%
Post-Harvest and Value addition Machinery/Equipments/Technologies					
18.	Tofu/Vegan Paneer Plant	1.08	60%	0.90	50%
19.	Ripening Chamber for Horticultural Produce (1 ton capacity)	1.20	60%	1.00	50%
20.	Sugarcane rind removing equipment for juice making	0.39	60%	0.325	50%

21.	Modular Onion Storage Structure (1-5 ton capacity)	0.15	60%	0.125	50%
22.	Moringa leaf stripper	0.30	60%	0.25	50%
23.	Rope twisting and winding equipment for plant fibre extracts	0.90	60%	0.75	50%
24.	Multi-feed banana fibre extraction equipment	1.35	60%	1.125	50%
25.	Makhana popping and decortication machine	3.30	60%	2.25	50%
26.	Automatic Wadi making machine	3.30	60%	2.25	50%
27.	Mechanized system for primary processes and roasting of raw makhana / Rotating open-pan roasting machine – LPG heated	1.02	60%	0.85	50%
28.	Solar operated phase change material-based fruits-vegetables vending pushcart	1.20	60%	1.00	50%
29.	Paddy Mobile dryer	9.00	60%	7.50	50%
30.	Tractor PTO/Electric Motor operated Onion De-topper cum grader	4.20	60%	3.50	50%
31.	Cow dung briquetting machine	0.42	60%	0.35	50%
32.	Cow dung dewatering machine	0.90	60%	0.75	50%

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 31st March 2023. Financial Assistance for purchase of Drone for Demonstration will be applicable till 31st March 2023 and also the grants to meet contingent expenditure for demonstration shall be applicable till 31st 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:

- (i) 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)