

WRITTEN ANSWERS TO UNSTARRED QUESTIONS

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

RAJYA SABHA
UNSTARRED QUESTION NO. 3841
TO BE ANSWERED ON 04/04/2025

PROMOTION OF DRONES IN AGRICULTURE

3841. SHRI RAJEEV SHUKLA:

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

- (a) whether Government is taking measures to promote the use of drones in agriculture in the country;
- (b) if so, the details thereof;
- (c) the progress made in this respect, State/UT-wise;
- (d) the challenges faced in this regard; and
- (e) the proposed measures to be taken in this respect?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
(SHRI RAMNATH THAKUR)

(a) to (e) : The Department of Agriculture and Farmers Welfare (DA&FW) is promoting adoption of Kisan Drones by the farmers. Financial assistance under the Sub-Mission on Agricultural Mechanization (SMAM) is provided for demonstration of kisan drones on farmers' fields, purchase of drones by the farmers on individual ownership basis and establishment of Custom Hiring Centres of Kisan drones for providing services of drones to farmers on rental basis.

Under SMAM, since 2021-22 and as on 31.03.2025, the funds amounting to Rs. 141.39 crores have been allocated 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 Krishi Vigyan Kendras (KVKs), 75 Indian Council of Agricultural Research (ICAR) institutions and 25 State Agricultural Universities (SAUs). The institutions of ICAR have procured 296 drones and these Institutions have carried out 27,099 drone demonstrations on nutrients, fertilizers and pesticide applications following the Standard Operating Procedures (SOPs) covering 30,235 hectare area. The funds have been released to the State Governments for supply of 544 Kisan Drone to farmers on subsidy and establishment of 1595 Kisan Drone CHCs to provide drone services to the farmers. The State-wise and institution-wise number of drone approved by DA&FW under SMAM as on 31.03.2025 is given in Annexure-I.

The Government has also approved 'Namo Drone Didi' as Central Sector Scheme for providing 15000 drones to the Women Self Help Groups (SHGs) with an outlay of Rs. 1261 Crores for the period from 2023-24 to 2025-26. Under this scheme, Central Financial Assistance (CFA) @ 80% of the cost of drone and accessories/ancillary charges up to a maximum of Rs. 8.00 lakhs per drone is provided to the selected women SHGs. Lead Fertilizer Companies (LFCs) have distributed 1094 drones to drone didis of SHGs in 2023-24 using their internal resources and the State-wise number of women SHGs who have been provided drones is indicated in Annexure-II. Out of these 1094 drone distributed to drone didis, 500 drones have been distributed under the Namo Drone Didi Scheme. Distribution of remaining 14500 has been targeted by the end of financial year 2025-26.

A study on economics and business viability of drone operations on the 500 drones distributed by LFCs under Nammo Drone Didi scheme in 2023-24 has been entrusted to the Agricultural Development and Rural Transformation Centre (ADRTC), Bangalore. The preliminary findings indicates that the farmers have shown willingness to go for drone services at an average of Rs. 400 per acre and reported benefits in terms of saving in water, labour cost, pesticide and fertilizer consumption, contributing to increase in their productivity.

In order to address some of the challenges like non-availability of crop-specific knowledge, limited hands-on training, lack of sufficient batteries etc, the DA&FW has released Standard Operating Procedure (SOP) for drone application with pesticide for crop protection and for spraying soil and crop nutrients in agricultural, forestry, non-cropped areas etc. SOPs for application of pesticides with drones have also been released, which has widened the potential use of Kisan Drones with pesticides in 10 different crops grown under diverse agro-climatic conditions.

Under the Nammo Drone Didi scheme, the drones are supplied as a package, which consists of basic drone with spray assembly for spraying liquid fertilizers and pesticides. The package includes additional 4 spare battery sets, one spare propeller set, nozzle set, dual channel fast battery charger, battery charger hub, 15 days training for drone pilot, drone assistant training, one year comprehensive insurance, 2 years annual maintenance contract and applicable GST. The 15 days drone pilot training programme include compulsory training for securing drone pilot licence, preparation for flying, minor repair and maintenance and hands on practice for handling drones for spraying of pesticides and liquid fertilizers.

Annexure- I

State-wise and Institution-wise Numbers of Drones approved /distributed under Sub Mission on Agricultural Mechanization (SMAM)

S. No.	State	No. of drones for distribution to individual farmers	Number of Drones for distribution to the CHCs	Number of drones for demonstration
1.	Andhra Pradesh	-	1475	-
2.	Arunachal Pradesh	2	-	-
3.	Bihar	5	-	-
4.	Chhattisgarh	-	50	-
5.	Karnataka	17	7	-
6.	Kerala	24	-	-
7.	Madhya Pradesh	300	-	-
8.	Maharashtra	17	25	-
9.	Manipur	-	4	-
10.	Nagaland	-	2	-
11.	Tamil Nadu	10	-	-
12.	Uttar Pradesh	158	-	-
13.	Uttarakhand	2	32	-
14.	West Bengal	4	-	-
15.	Puducherry	5	-	-
16.	Indian Council of Agricultural Research (ICAR)	-	-	170
17.	Agricultural Universities including State Agricultural Universities	-	-	33
18.	Krishi Vigyan Kendras (KVKs)	-	-	93
	Total	544	1595	296

State-wise number of women SHGs who have been provided drones by the LFCs in
2023-24

S. No	State Name	Number of women SHGs who have been provided drones
1.	Andhra Pradesh	108
2.	Assam	28
3.	Bihar	32
4.	Chhattisgarh	15
5.	Goa	1
6.	Gujarat	58
7.	Haryana	102
8.	Himachal Pradesh	4
9.	J&K	2
10.	Jharkhand	15
11.	Karnataka	145
12.	Kerala	51
13.	Madhya Pradesh	89
14.	Maharashtra	60
15.	Odisha	16
16.	Punjab	57
17.	Rajasthan	40
18.	Tamil Nadu	44
19.	Telangana	81
20.	Uttar Pradesh	128
21.	Uttarakhand	3
22.	West Bengal	15
Total		1094
