

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

LOK SABHA
UNSTARRED QUESTION NO. 279
TO BE ANSWERED ON THE 22ND JULY, 2025

**PROMOTION OF AGRICULTURE THROUGH ARTIFICIAL INTELLIGENCE
TECHNOLOGY**

279. SHRI MURARI LAL MEENA:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether the Government is formulating or already implementing any specific scheme to promote the use of advanced technologies such as Artificial Intelligence (AI) and drone technology in agriculture;
- (b) if so, the types of facilities, technical support or subsidies being provided to farmers under such scheme(s);
- (c) the details and number of States/districts in the country where AI and drone technology have so far been introduced in agriculture, State/district-wise; and
- (d) whether the Government is preparing any concrete action plan to expand this technology to more districts/regions in the future and if so, the details of the proposed expansion plan and the targeted timeline?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
कृषि एवं किसान कल्याण राज्य मंत्री (SHRI RAMNATH THAKUR)

(a) to (d): The government has employed Artificial Intelligence (AI) methods and IoT-enabled systems to improve crop productivity, sustainability and farmer livelihoods, and to address various challenges in the agricultural sector to aid farmers, etc. Some initiatives are given below:

- I. 'Kisan e-Mitra' is a voice-based AI-powered chatbot developed to assist farmers with responses to their queries on the PM Kisan Samman Nidhi scheme. This solution supports 11 regional languages and is evolving to assist with other government programs. At present, it handles over 20,000 farmer queries daily and so far, more than 95 lakh queries have been answered.
- II. The National Pest Surveillance System, for tackling the loss of produce due to climate change, utilizes AI and Machine Learning to detect pest infestation in crop issues, enabling timely intervention for healthier crops. This tool, currently used by over 10,000 extension workers, allows farmers to capture images of pests to help them mitigate pest attacks and reduce crop losses. At present, it supports 61 crops and over 400 pests.
- III. AI-based analytics using field photographs for satellite-based crop mapping being used in Crop-weather matching monitoring of crops sown.

Further, in order to promote the use of drones in agriculture, under 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 the Government of India States/district in the country engaged in agricultural activities. The Farmers Producers Organizations (FPOs) are provided grants up to 75% of the cost of the Kisan Drone for its demonstrations on the farmers' fields. 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 the purchase of drones on an 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 per drone.

The Government has approved 'Namo Drone Didi' as Central Sector Scheme with an outlay of Rs. 1261 Crores for a period of 3 years (2023-24 to 2025-26) with the major aims and objectives promoting advance technology in agriculture for improved efficiency, enhanced crop yield and reduced cost of operation and to empower Women Self Help Groups (SHGs) as drone service providers for increasing their income and providing livelihood support to them. Under the Namo Drone Didi scheme, the target is to provide 15,000 Drones to Women SHGs. 1094 drones have been distributed to SHGs by the Lead Fertilizer Companies in 2023-24 by utilizing their internal resources. Distribution of 14,500 drones has been targeted by the Department for which the Government will provide 80% subsidy on drone' package (max 8.0 lakhs per SHG). The balance 20% is to be borne by the SHGs. They may also take a loan under Agri Infra Financing (AIF) with 3% interest subvention.

1094 drones have been distributed to SHGs by the Lead Fertilizer Companies in 2023-24, utilizing their internal resources. Out of these 1094 drones, 500 drones have been distributed to SHGs under the Namo Drone Didi scheme. The details of drones distributed state-wise are given at annexure.

State-wise Numbers of Drones approved /distributed under Sub-Mission on Agricultural Mechanization and Namo Drone Didi

Sr.No	State	Drones approved/distributed under SMAM (Individual/CHCs) (In Numbers)	Drones distributed under Namo Drone Didi by LFCs (In Numbers)	Total
1.	Andhra Pradesh	1475	96	1571
2.	Arunachal Pradesh	2	0	2
3.	Assam	0	9	9
4.	Bihar	5	5	10
5.	Chhattisgarh	50	12	62
6.	Gujarat	0	18	18
7.	Haryana	0	22	22
8.	Himachal Pradesh	0	4	4
9.	Jharkhand	0	1	1
10.	Karnataka	24	82	106
11.	Kerala	24	2	26
12.	Madhya Pradesh	300	34	334
13.	Maharashtra	25	30	55
14.	Manipur	4	0	4
15.	Nagaland	2	0	2
16.	Punjab	0	23	23
17.	Rajasthan	0	19	19
18.	Telangana	0	72	72
19.	Odisha	0	12	12
20.	Tamil Nadu	10	17	27
21.	Uttar Pradesh	158	32	190
22.	Uttarakhand	34	3	37
23.	West Bengal	4	7	11
24.	Puducherry	5	0	5
	Total	2122	500	2622
