

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

LOK SABHA
UNSTARRED QUESTION NO. 5044

TO BE ANSWERED ON THE 01ST APRIL, 2025

**KISAN E-MITRA AND IOT ENABLED SYSTEMS TO IMPROVE CROP
PRODUCTIVITY**

5044. Adv Gowaal Kagada Padavi:

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

- (a) whether the Government has implemented the Kisan e-Mitra and IoT-enabled systems to improve crop productivity, sustainability and farmer livelihoods, if so, the details thereof;
- (b) the manner in which Artificial Intelligence (AI) helped in solving agrarian crisis, crop health monitoring, water optimization, crop rotation and harvesting methods, if so, the details thereof; and
- (c) the details of other steps being taken by the Government to strengthen the development of Artificial Intelligence in Agricultural Sector for India and particularly in the State of Maharashtra?

ANSWER

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

(a) to (c): 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 including Kisan e-Mitra are given below:

- I. 'Kisan e-Mitra', is a voice-based AI-powered chatbot, developed to assist farmers with responses to their queries on 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 92 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 currently 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.