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

LOK SABHA
UNSTARRED QUESTION NO. 2914
TO BE ANSWERED ON THE 18TH MARCH, 2025

ARTIFICIAL INTELLIGENCE METHODS IN AGRICULTURAL SECTOR

2914. SHRI BAJRANG MANOHAR SONWANE:

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

(a)   whether the Government has employed Artificial Intelligence (AI) methods to address challenges in the agricultural sector, if so, the details of AI-based projects or initiatives undertaken to aid farmers;
(b)   whether the State Government of Maharashtra have implemented AI-based agricultural solutions and if so, the details thereof;
(c)   whether the Government is planning to expand AI adoption to small and marginal farmers and if so, the details thereof;
(d)   whether the Government has introduced AI-driven systems for early detection of crop diseases and pest attacks, if so, the details of AI-based models being used, their effectiveness and the number of farmers who have benefited from these technologies;
(e)   whether the Government is providing training programs for farmers on the use of AI tools in pest and disease management; and
(f)   the details of steps being taken to ensure accessibility of AI technologies to farmers in remote and rural areas?

ANSWER

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

(a) to (f): The Government has employed Artificial Intelligence (AI) methods to address various challenges in the agricultural sector to aid farmers. Some of the initiatives are given below:

I. 'Kisan e-Mitra', an AI-powered chatbot, has been developed to assist farmers with responses to queries about the PM Kisan Samman Nidhi scheme. This solution supports multiple 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 with approx. 1 lakh uploaded images.

III. AI-based analytics using field photographs for crop health assessment and crop health monitoring using Satellite, weather & soil moisture datasets for rice and wheat crops.

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