

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

RAJYA SABHA
UNSTARRED QUESTION NO. 482
TO BE ANSWERED ON THE 07/02/2025

USE OF AI IN AGRICULTURE

482. SHRI G.C. CHANDRASHEKHAR:

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

- (a) whether Government plans to use Artificial Intelligence (AI) to address issues like inferior crop quality, reduced production and rising input costs in agriculture, if so, the details thereof;
- (b) whether AI will be used to mitigate crop losses caused by global warming and climate change, if so, the details thereof;
- (c) the steps taken to implement AI in these areas;
- (d) whether AI-based techniques have been developed to monitor and assess crop health, if so, the details thereof;
- (e) the names and details of crops currently being worked on through AI; and
- (f) the manner in which farmers will benefit from this technology?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
(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 the queries about the PM Kisan Samman Nidhi scheme. This solution supports multiple languages and is evolving to assist with other government programs.
- ii. 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.
- 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 crop.
