

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

**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 9**  
TO BE ANSWERED ON 02/02/2024

**USE OF AI TO TACKLE PROBLEMS IN AGRICULTURE**

9. SMT. DARSHANA SINGH:

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

- (a) whether Government is planning to use Artificial Intelligence (AI) to tackle problems of inferior crops, reduction in production and increasing input cost in the field of agriculture;
- (b) if so, the details thereof;
- (c) whether Government also proposes to use AI to check the loss of produce/crops due to global warming and climate change;
- (d) whether Government has developed any technique through AI by which the health of crops can be ascertained and monitored and if so, the details thereof; and
- (e) the manner in which farmers are going to be benefitted through this technology?

**ANSWER**

MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI ARJUN MUNDA)

(a) to (e): The Ministry of Agriculture and Farmers Welfare in India 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 to assist farmers with 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. This system utilizes AI and Machine Learning to detect 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.