

## Role of Technology in Transforming Indian Agriculture

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India's agricultural sector is undergoing a digital revolution, leveraging advanced technologies to address challenges and improve productivity. Precision agriculture, powered by GPS and IoT devices, allows farmers to monitor soil conditions, optimize irrigation, and minimize waste. Drones are being used for aerial surveys, crop health monitoring, and even pesticide application, reducing human labor and improving efficiency.

Artificial intelligence (AI) and machine learning are also making strides in predicting weather patterns, pest outbreaks, and yield forecasts. Platforms such as eNAM (National Agriculture Market) enable farmers to connect directly with buyers, ensuring fair prices and reducing middlemen exploitation.

Despite these advancements, challenges like digital literacy and affordability need to be addressed. Collaborative efforts between the government, private sector, and educational institutions can provide the necessary support for farmers to adopt these

innovations. The fusion of traditional knowledge and modern technology holds the key to sustainable growth in Indian agriculture.