IITI develops CropDoctor & Krishi Sewa apps to aid farmers

Our Staff Reporter

INDORE

Days after making special shoes for Indian army personnel, the Indian Institute of Technology Indore has now made a significant leap towards modernising agriculture with the development of two innovative mobile applications: "Krishi Sewa" and "CropDoctor."

These apps are designed to assist farmers in managing their crops more effectively, focusing on identifying diseases, pests, and nutritional deficiencies.

"Krishi Sewa," spearheaded by a team of researchers under the supervision of Prof Aruna Tiwari from the Department of Computer Science and Engineering (CSE) at IIT Indore, in collaboration with Dr Shashi Rawat, principal scientist at ICAR-Central Institute of Agricultural Research, Bhopal, promises to revolutionise farming practices across India. This app will empower farmers with the tools they need to enhance crop health and productivity.

In parallel, "CropDoctor," another significant development, is set to transform soybean farming in the heartland of Indian agriculture. Prof Aruna Tiwari and Dr Milind Ratnparkhe, principal scientist from ICAR-Indian Institute of Soybean Research also supervised the project. Designed for Android devices, CropDoctor will help farmers efficiently manage diseases and pests affecting their soybean crops, making it an accessible and invaluable resource for a wide range of users.

IIT Indore director Prof Suhas Joshi said, Together, these projects represent a concerted effort to bring cutting-edge technology to the forefront of Indian agriculture, promising a brighter and more productive future for farmers across the nation.

Krishi Sewa and CropDoctor are mobile apps designed to help farmers diagnose and manage crop health. Krishi Sewa allows farmers to take photos of affected plants and receive detailed information on diseases and pests for crops

Krishi Sewa does not require internet

Tiwari said, These apps address several critical challenges faced by farmers. Misidentifying pests and diseases often lead to incorrect treatments, resulting in poor crop yields and financial losses. By providing accurate diagnostics and management advice, both apps help farmers make informed decisions, thereby improving crop health and productivity.

Additionally, they offer information on soil management and farming practices, promoting sustainable agriculture. The unique selling point (USP) of these apps lies

like potato, wheat, rice, soybean, and mustard.

Likewise, CropDoctor focuses on soybean crops, offering guidance on disease and pest control, soil management, and farming practices, aimed at improving productivity for soybean farmers across India, he added.

in its comprehensive and user-friendly platform that combines a wealth of agricultural information into one application. They support both Hindi and English, ensuring that farmers from diverse linguistic backgrounds can use the apps effectively.

This bilingual feature enhances accessibility and usability, making it easier for farmers to identify issues and get timely advice. Additionally, Krishi Sewa does not require an internet connection, enabling most farmers to benefit from it, he concluded.

The development of the apps has been completed and currently is in copyright stage, leveraging cutting-edge technologies to ensure accurate disease and pest identification. The application is in the process of securing copyright protection to safeguard its unique features and content.