



National Pest Surveillance System (NPSS)

[Source: TH](#)

Recently, the union government has launched the **National Pest Surveillance System (NPSS)**, an **Artificial Intelligence (AI)-based platform** aimed at **connecting farmers with agricultural scientists** and experts to enhance pest control measures.

- This initiative is part of a broader strategy to **reduce farmers' reliance on pesticide retailers** and promote a scientific approach to pest management.

Features of NPSS Platform:

- **AI-Driven Analysis:** The system utilises **Artificial Intelligence (AI)** to analyse real-time data on pest infestations, allowing for timely interventions.
- **Direct Communication:** Farmers can easily **communicate with experts by uploading images of affected crops** or pests via their mobile phones, facilitating rapid diagnosis and treatment recommendations.
- **Reduction of Pesticide Dependence:** By providing **accurate pest management advice**, NPSS aims to decrease the overuse of pesticides, thereby promoting sustainable agricultural practices.
- **Widespread Reach:** The platform is **expected to assist approximately 140 million farmers across India**, enhancing accessibility to expert advice.
 - The app will help farmers avoid unnecessary pesticide purchases by providing accurate advice on pest management.
- **Integration with Local Outreach:** The technology will be disseminated through state-level outreach programs, ensuring that farmers receive support tailored to their regional agricultural challenges.

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7 USE CASES



PEST CONTROL

Image-recognition technology identifies and treats various types of bugs and vermin.

AI algorithms determine which breeds and conditions will produce the highest yields

BOOST CROP YIELD



SEASONAL FORECASTING

AI systems create probabilistic models for seasonal forecasting.

AI enhances IoT devices transforming farm management systems.

ENHANCE IOT DEVICE DATA



BETTER CROP SELECTION

AI helps determine crop choices for farm's needs.

Chatbots answer farmer's questions, provide advice and recommendations on specific farm problems

CHATBOTS FOR FARMERS



AGRICULTURAL ROBOTS

Agricultural robots harvest crops faster than human laborers.

Read More: [Adoption of Modern Technology in Agriculture](#)

PDF Reference URL: <https://www.drishtias.com/printpdf/national-pest-surveillance-system-npss>