



Solution:

Plant protection application app: Plantix

Submitter: (ICRISAT)

Solution Overview

What is it, and what problem does it solve? Brief 2–3 sentence description.

About 40% of the crop yield is lost to pests, diseases and weeds (FAO, 2024). In lack of understanding about pest and disease infestation, farmer largely are dependent on local vendors and follow inappropriate practices for pest and disease management. To equip the farmers and field workers with authentic information regarding the identification of the crop problem and also its solution, this app was designed.

Key Features & Benefits

Main components and why it is useful? Bullet points summarizing methods, tools, and value added.

- A farmer needs an android smartphone, internet connection and install the app.
- When crop has a damage symptom, the user captures and upload an image through the app
- The app will automatically diagnose pest, disease or nutritional deficiency in few seconds and provide science based advisories on biological and control management (over 700 classifications covering 60 crops)
- These is a community feature that enables users to interact with experts and fellow farmers. This is vital for discussions on other ways to control their problems.
- A farmer can have targeted extension advisory on agronomy of crop production using an inbuilt crop calendar.
- There is an offline feature that enables users with a library of pest, disease and nutrient deficiencies.
- This empowers the farmers to take the correct decision and manage the problem at his/her own level

Where It Works and Where It Can Work

Existing and potential target regions, agroecologies, or farming systems. Include examples if available.

This application is for the global farming community as google analytics show users from all around the world with over 45 million downloads. All the user needs is a smartphones with mobile data connectivity. Currently 60 different kinds of crops including cereals, legumes, vegetables and fruit are addressed through this application. In places where professional agricultural extension system is limited, this app is truly a game changer to smallholder farmers who rely on local traders for their advisories and purchases of agrochemicals.

Evidence & Impact

What results has it shown? Stats, pilot outcomes, or testimonials.

This is the most downloaded agriculture related tech app and has answered more than 180 million crop health related questions through images. Google play store shows more than 45 million users with 1.2 million monthly average user base. The app has an accuracy of more than 93% in performance in farmers fields. Testimonials from farmers are available in www.plantix.net

Scalability & Adoption Support

Why it can be scaled and what's needed to adopt it?

Low-cost, adaptable, partner-ready, etc.

Since the app is user friendly, the dissemination of knowledge helps in sustainable and profitable farming. The app comes in 18 global languages including Swahili and Arabic. The short time span of 2-3 seconds required to give a diagnostic solution to an existing crop problem in the field is one of the hallmarks of this app. Feed back from growers from all over the world has been positive on the performance of this app.

Partners & Contact Info

Who's involved and how to connect? List of key contact and partners + email / phone.

Srikanth Rupavatharam: srikanth.rupavatharam@icrisat.org

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