

Nuru: In-field Pest and Disease Diagnosis

Crop Care in Your Pocket: Nuru App, Your Farming Companion

PlantVillage Nuru is an innovative smartphone app that uses artificial intelligence for offline diagnosis of crop damage by diseases and pests. It offers instant diagnoses and guidance on disease and pest control, empowering farmers to enhance agricultural productivity and food security.



✓ This technology is **TAAT1 validated**.

8-8



Scaling readiness: idea maturity 8/9; level of use 8/9



Open source / open access

Problem

- Farmers often struggle to identify crop damage caused by diseases and pests, which can lead to reduced crop yields and economic losses.
- Many farmers lack access to expert advice and information on how to manage and control crop diseases and pests effectively.
- Language barriers can make it challenging for farmers to access relevant information and guidance on crop protection.

Solution

- PlantVillage Nuru offers instant offline diagnosis of crop damage symptoms caused by diseases and pests using artificial intelligence and machine learning.
- The app connects users to a network of nearby users and provides information on how to control the identified diseases and pests, offering expert advice and solutions.
- The app is available in multiple languages, making it accessible to a wider range of users and overcoming language barriers.
- The app employs machine learning and object recognition, allowing it to continuously improve and enhance its accuracy in diagnosing crop issues.

Key points to design your business plan

- PlantVillage Nuru enables swift offline diagnosis of crop damage, aiding farmers in proactive pest and disease management.
- The technology is provided as a public good, free for download with no licensing fees.
- Cost structure involves potential facilitation through phone provision and training sessions.
- Profit estimation is necessary to gauge the financial benefits of implementing this practice.

Inclusion assessment



Climate impact



Technology from

ProPAS

Commodities

Maize, Cassava, Other root/tuber

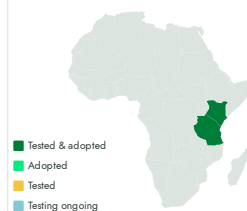
Sustainable Development Goals



Categories

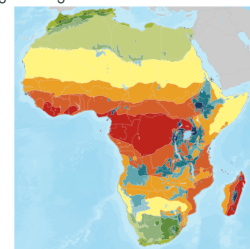
Production, Digital applications, Advisory and information service

Tested/adopted in



Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Farmers



Nuru

<https://taat.africa/nnu>

Last updated on 11 August 2025, printed on 11 August 2025

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