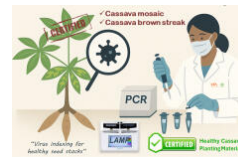


# Cassava virus indexing: Molecular diagnostics for cassava seed health certification

Virus diagnostic tool for cassava seed health certification by seed producers and seed certifiers.

**Cassava virus indexing** is a method used to detect and remove virus-infected cassava plants early in the seed production process. It uses advanced diagnostics like **PCR** and **LAMP** to ensure only virus-free plants are used. This helps maintain seed quality, strengthens crop health, and supports seed certification efforts, making it essential for seed producers and certifiers in cassava-growing regions.



Commodities

Cassava

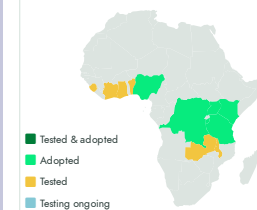
Sustainable Development Goals



Categories

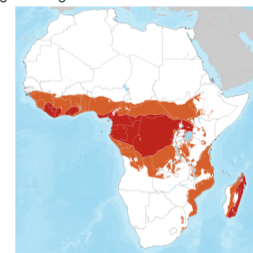
Pre-production, Practices,  
Pest control (excluding weeds), Seed system

Tested/adopted in



Where it can be used

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



Target groups

Breeders, Seed companies,  
Advisory and Extension Services,  
Seed Regulators

This technology is **pre-validated**.

9-8



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

Gender assessment

4

Climate impact

3

## Problem

- Virus-infected cassava planting materials are often unknowingly used in seed production.
- Vegetative propagation (e.g., stem cuttings) increases the risk of virus transmission.
- Cassava crops are highly vulnerable to damaging viruses like CMD (Cassava Mosaic Disease) and CBSD (Cassava Brown Streak Disease).
- Lack of effective screening tools leads to poor seed quality and crop losses.

## Solution

- **Accurate detection** of viruses using PCR and LAMP techniques.
- **Virus-free planting material** selection for better seed quality.
- **Improved seed certification** by enabling diagnostic-based certification.
- **Increased crop resilience** and yield by using healthy seeds.

## Key points to design your program

**Cassava Virus Indexing** improves cassava seed quality and food security by detecting and removing virus-infected planting materials early.

To integrate it into your program:

- **Raise awareness** among seed actors about the benefits of virus-free seeds.
- **Train** lab and field staff in PCR/LAMP diagnostics.
- **Fund** equipment, supplies, and testing costs.
- **Monitor** impact through data on infection rates and seed quality improvements.

**20,000 USD**

Initial setup cost for a diagnostic lab

**3 USD**

Cost per sample for testing



No formal IP rights



Cassava virus indexing

<https://taat.africa/fwd>

Last updated on 12 May 2025, printed on 15 May 2025

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