

BASICS Model: A Seed System Model for Cassava Transformation



An economically sustainable integrated cassava seed system!

The **BASICS Model** is a full-package solution to modernize cassava seed production and distribution. It moves away from giving free stems to farmers and instead supports a **commercial approach** where certified cassava seeds (stem cuttings) are produced, inspected, and sold by trained seed entrepreneurs.



This technology is **pre-validated**.

8•8



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

Gender assessment



Climate impact



Problem

- Cassava yields remain low due to farmers using infected, uncertified planting material.
- This increases food insecurity and keeps rural incomes low.
- Most national seed systems lack regulation and traceability.

Solution

- **Reliable access to improved varieties:** BASICS ensures farmers get **disease-free, high-yielding** planting materials.
- **Disease control through virus indexing:** Early-generation seed is tested and verified to be virus-free using diagnostics tools, reducing disease incidence.
- **Sustainable business model:** Seed is **sold, not given away**, creating **local jobs** and ensuring long-term supply through seed entrepreneurs.
- **Digital monitoring:** Tools like **Seed Tracker** support regulators and seed producers in quality control, increasing transparency and traceability.
- **Boosted yields:** Adoption of the system can **double cassava yields** from less than 10 tons/ha to **20 tons/ha or more**.

Key points to design your project

Cassava demand is rising fast with new processing industries. To implement it:

- Set up a public or hybrid early-generation seed (EGS) unit.
- Install SAH labs to rapidly multiply improved varieties.
- Support youth-led Cassava Seed Entrepreneurs (CSEs) as a job creation tool.
- Strengthen regulatory agencies for quality assurance.



Open source / open access



IITA and Sasakawa Africa Association

Dr Godwin Atser

Commodities

Cassava

Sustainable Development Goals



Categories

Pre-production, Practices,
Yield improvement, Seed system

Best used with

- [Early Generation Seed Production of Cassava](#)
- [Capacity Building Strategies](#)
- [Marketing Strategies](#)
- [Molecular diagnostics for cassava seed health certification](#)
- [Cassava Seed Entrepreneur Business Model](#)
- [Nuru for in-field Pest](#)
- [Cassava Seed Quality Management system](#)
- [Cassava Seed Monitoring System](#)
- [Digital tool for Strengthening Seed Governance and Certification Systems](#)
- [Organized support networks for cassava seed entrepreneurs](#)
- [Cassava Seed System Advocacy and Scaling](#)



BASICS Model

<https://e-catalogs.taatafrica.org/gov/technologies/basics-model-a-seed-system-model-for-cassava-transformation>

Last updated on 6 May 2025, printed on 6 May 2025

Enquiries e-catalogs@taatafrica