

BASICS Model: A Seed System Model for Cassava Transformation



An economically sustainable integrated cassava seed system!

The **BASICS (Building an Economically Sustainable Cassava Seed System)** model links early-generation seed production, commercial seed entrepreneurs, and digital tools to create a self-sustaining cassava seed supply chain.



This technology is **pre-validated**.

8•8



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



Open source / open access

Problem

- Unpredictable stem quality and yield: less than **10 tons/ha** in informal systems.
- High disease load with over **80% of stems infected** in farmer fields.
- Donor-dependent models distort markets and disincentivize private investment.
- Lack of formal seed value chain hinders commercial cassava supply chains.

Solution

- Creates new **agri-enterprise opportunities** in seed multiplication and distribution.
- Disease-free, improved seed delivers **consistent yield gains** (up to 20–25 tons/ha).
- Use of **digital apps** enables scalable monitoring, remote traceability, and marketing.
- Certified seed linked to growing **demand from processors**, bakers, and starch producers.
- Seed businesses report strong **ROI within 1–2 planting cycles**.

Key points to design your business plan

Cassava is a growing market. To leverage it:

- Launch an EGS seed business.
- Invest in SAH labs for fast, clean propagation.
- Develop CSE networks to expand market reach.
- Partner with regulators to ensure certification.

Gender assessment



Climate impact



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/com/technologies/basics-model-a-seed-system-model-for-cassava-transformation>

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