

IITA Capacity Development Technologies

The capacity-building unit develops models that build entrepreneurial, technical, and managerial skills among agricultural actors in collaboration with various units. The unit focuses on student training, business models development, advocacy, marketing strategies, and capacity-building approaches for sustainable seed system development,...

5 TECHNOLOGIES | CREATED ON OCT 14, 2025 BY TAAT PROFILING TEAM | LAST UPDATED DEC 10, 2025


TECHNOLOGIES IN THIS TOOLKIT

- **CSAM**: Organized support networks for cassava seed entrepreneurs
- **CSE Model**: Cassava Seed Entrepreneur Business Model
- **Cassava Seed System Advocacy and Scaling Model**
- **Marketing strategies for cassava seed system**
- **Capacity Building Strategies on Cassava Seed System**

https://taat.africa/qtg

CSAM: Organized support networks for cassava seed entrepreneurs

Building stronger cassava seed businesses for African seed entrepreneurs and farmers.

Cassava Seed Association Model (CSAM) formalizes cassava seed production by forming structured associations of seed entrepreneurs. These associations enable access to certification, finance, training, and policy advocacy, improving seed quality and market access.

International Institute of Tropical Agriculture (IITA)
Regina Kapinga

This technology is **not yet validated**.

9·3 Scaling readiness: idea maturity 9/9; level of use 3/9

Inclusion assessment 3

Climate impact 6

Problem

- Fragmented seed production leads to high costs, poor quality, and limited access to certification and finance.
- Free seed distribution undermines the development of a sustainable, commercial seed market.
- Weak advocacy and policy influence due to lack of formal structures.

Solution

- Establishes formal associations, providing joint certification and collective marketing.
- Improves access to financing and market opportunities.
- Strengthens advocacy for favorable policies and long-term investment.

Key points to design your project

- **The Cassava Seed Association Model (CSAM)** transforms fragmented cassava seed production into an inclusive, sustainable, and market-driven system by legally organizing seed producers into empowered associations.
- It facilitates access to certification, finance, training, and policy platforms—advancing gender equity, youth participation, and resilience in line with SDGs.
- A complete implementation toolkit and technical support are available to scale impact through partnerships with NARS, regulators, and the TAAT network.

IP

Open source / open access

Commodities

Cassava

Sustainable Development Goals

Categories

Pre-production, Practices,

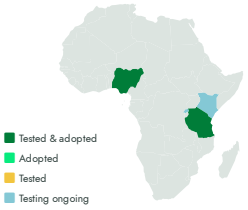
Yield improvement, Seed system

Best used with

Digital Tool for Strengthening Seed Governance and Certification Systems

See all 1 technologies online

Tested/adopted in



Where it can be used

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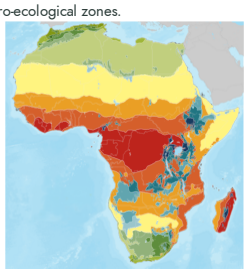

Target groups

CSE Model: Cassava Seed Entrepreneur Business Model

Transforming Cassava Farming Through Entrepreneurial Innovation!

The CSE Business Model empowers local entrepreneurs by providing training and certification in seed production and a straightforward digital quality-control platform, links them to buyers through pre-agreed contracts and cooperative financing, and has scaled to deliver over 11 million disease-free cuttings annually in Tanzania and Nigeria.

International Institute of Tropical Agriculture (IITA)
James Legg

This technology is pre-validated.

9·3 Scaling readiness: idea maturity 9/9; level of use 3/9

Inclusion assessment 3

Climate impact 7

Problem

- Informal seed sharing and free handouts spread pests and diseases.
- Farmers lose over 50 % of potential yields due to poor-quality cuttings.
- Dependency on donations discourages local investment.

Solution

- Train and register CSE entrepreneurs to produce certified seed.
- Deliver 83 million clean cuttings/year in Tanzania, generating USD 1.5 M.
- Strengthen local seed systems for sustainable yield gains.

Key points to design your project

- Professionalize cassava seed systems by onboarding CSEs into formal roles, boosting food security, gender inclusion and climate resilience.
- Engage regulators, extension services and community groups with MoUs to define roles, data sharing and policy alignment.
- Deploy SeedTracker™ for digital plot registration, real-time dashboards and e-certification, supported by "train-the-trainer" workshops.
- Mobilize SACCOS/RLF finance, seed-production grants, M&E analytics and policy briefs to scale, sustain and refine the model.

IP

Open source / open access

Commodities

Cassava

Sustainable Development Goals

Categories

Pre-production, Practices, Yield improvement, Seed system

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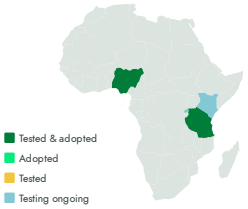

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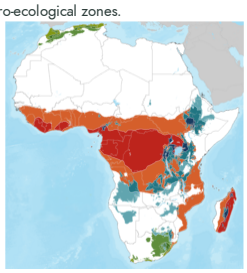


Target groups

Farmers, Processors, Seed companies, Advisory and Extension Services, Seed Regulators

Cassava Seed System Advocacy and Scaling Model

From Advocacy to Action: Replicating Success with Lasting Investment

This model helps governments and development partners build strong national cassava seed systems. It promotes long-term solutions by integrating proven technologies—like Early Generation Seed, SAH, and digital tools—into national plans and policies. Through coordinated advocacy and planning, the model strengthens local leadership, supports seed entrepreneurs, and improves farmer access to clean, improved cassava seed. It has already been used in over 10 countries, showing strong potential for scaling and sustainability.

International Institute of Tropical Agriculture (IITA)
Regina Kapinga

This technology is pre-validated.

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

Inclusion assessment 4

Climate impact 5

Problem

- Free seed distribution creates market distortions, dependency, and blocks private seed business development.
- Innovative models remain small due to lack of advocacy, funding, and policy integration.
- Weak advocacy and coordination prevent innovations from influencing national decisions and attracting investment.
- Short-term, project-based approaches end without lasting impact or sustainability mechanisms.

Solution

- Promotes commercial seed systems to reduce dependency on free seed.
- Helps scale successful models by integrating them into national policies and budgets.
- Builds advocacy platforms to align governments, donors, and seed actors.
- Replaces short-term projects with long-term, coordinated national programs.

Key points to design your project

This model helps governments lead the reform of cassava seed systems through national policies, coordinated action, and sustainable investment.

Key Points:

- **Contact IITA early** to access tools and technical support.
- **Secure institutional buy-in** from ministries or national research systems.
- **Host stakeholder workshops** to align roles and responsibilities.
- **Use MoUs or agreements** to formalize collaboration with partners.
- **Integrate into existing platforms** like cassava task forces or seed programs.
- **Apply standardized tools** for advocacy, training, and monitoring.
- **Commit public funding** to demonstrate ownership and attract donor support.
- **Start with a seed system assessment** to identify key gaps.
- **Strengthen existing institutions** rather than creating new ones.
- **Scale progressively** based on available resources and capacity.

IP

Open source / open access

Commodities

Cassava

Sustainable Development Goals

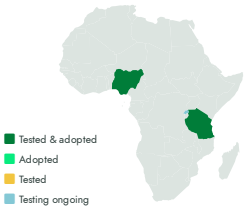
Categories

Pre-production, Policies

Best used with

Early Generation Seed Production of Cassava
See all 1 technologies online

Tested/adopted in



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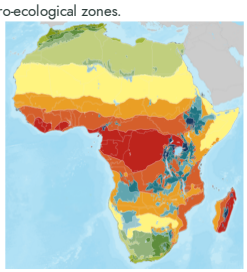


Target groups

Development institutions, Farmers, Governments, Processors, Seed companies,

Marketing strategies for cassava seed system

Sell Smart, Grow Fast

Marketing Strategies is a practical toolkit that helps cassava seed producers improve market access and visibility. It offers guidance on customer targeting, product positioning, and demand-driven marketing. By tackling issues like low awareness, weak customer ties, and poor pricing, it supports seed entrepreneurs, especially those working with vegetatively propagated crops, in building trusted, profitable, and resilient businesses.

International Institute of Tropical Agriculture (IITA) & Sahel Consulting Agriculture and Nutrition Limited

Temi Adegoroye

This technology is pre-validated.

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

Inclusion assessment 4

Climate impact 7

Problem

- **Low farmer awareness** of high-quality certified cassava seeds
- **Preference for traditional planting materials**, limiting demand for certified seeds
- **Weak market linkages** between seed producers and buyers
- **High transport costs**, creating bottlenecks in seed distribution
- **Limited access to affordable certified seeds**, due to high prices and lack of financing
- **Limited reach of traditional marketing channels**, such as radio and extension services
- **Underutilization of digital marketing tools**, reducing visibility and customer engagement
- **Barriers to business growth and seed adoption** for producers of vegetatively propagated crops (VPCs) like cassava

Solution

- **Increase awareness** through campaigns and demo plots.
- **Improve affordability** with flexible pricing and financing.
- **Train seed producers** in marketing and customer engagement.
- **Strengthen distribution** via dealers, cooperatives, and direct delivery.
- **Leverage digital tools** (SMS, radio, marketplaces).
- **Build trust** with branding and certification.
- **Support local marketers** with low-cost promotion strategies.

Key points to design your project

The **Marketing Strategies toolkit** helps cassava seed producers boost visibility, build trust, and increase demand for certified seeds. It supports climate and gender goals by promoting inclusive, data-driven marketing. Key steps include stakeholder engagement, training on marketing and branding, use of digital channels, and monitoring adoption. The toolkit includes ready-to-use materials and can be tailored to local needs with support from partners like IITA.

IP

Open source / open access

Commodities

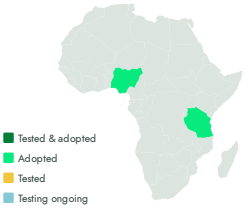
Cassava

Sustainable Development Goals

Categories

Production, Marketing, Policies

Tested/adopted in



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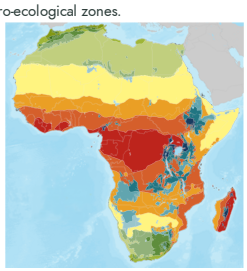


Target groups

Farmers, Processors, Seed companies, Advisory and Extension Services

Capacity Building Strategies on Cassava Seed System

From Knowledge to Yield — Empowering Cassava Seed Systems.

Building Capacity is a hands-on toolkit that helps cassava seed producers get better at what they do. It provides easy-to-use training materials, business tips, and ways to work better with others. The goal is to improve seed quality, increase harvests, and help seed businesses grow in a way that lasts.

International Institute of Tropical Agriculture (IITA) & Sahel Consulting Agriculture and Nutrition Limited
Temi Adegoroye

This technology is pre-validated.

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

Inclusion assessment 4

Climate impact 7

Problem

- **Limited Technical Skills** – Many seed producers lack the know-how for quality seed production.
- **Weak Business Knowledge** – Producers struggle to run seed ventures as profitable businesses.
- **Poor Market Access** – Limited connections to buyers reduce sales and visibility.
- **Weak Regulatory Links** – Little collaboration with seed authorities leads to certification issues.

Solution

- **Targeted Training** – Builds technical skills based on producers' real needs.
- **Business Tools** – Strengthens seed business planning and management.
- **Market Access** – Helps producers connect with more buyers.
- **Regulatory Support** – Improves compliance with seed quality standards.
- **Demo Fields** – Offers hands-on learning opportunities.
- **Needs Assessment** – Identifies gaps to guide training.
- **Impact Tracking** – Monitors progress and results.

Key points to design your project

The *Building Capacity* toolkit strengthens cassava seed systems by addressing gaps in skills, market access, and regulations. To implement, first **profile seed producers** and **assess their needs**, then **develop tailored training** and **offer hands-on learning opportunities**. **Build partnerships with institutions and regulators** to ensure alignment with industry standards. **Establish monitoring mechanisms** using key metrics to track progress and impact. Additionally, **train local trainers** to ensure ongoing support and capacity building. This approach fosters sustainable, profitable seed systems for cassava.

3,000 USD	3,000 USD	10,000 USD	10,800 USD	IP
Training manual development	Training Venue and other facilities	Facilitators Expense	Cost of printing the training materials	Unknown

Commodities

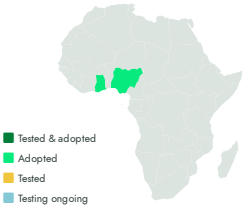
Bananas & plantains, Cassava, Sweet Potato

Sustainable Development Goals

Categories

Pre-production, Policies

Tested/adopted in



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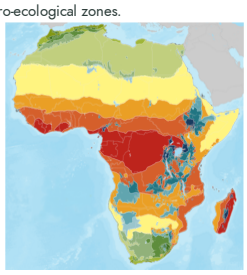

Target groups

Farmers, Seed companies

AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE DE DÉVELOPPEMENT

Technologies for African Agricultural Transformation

IITA Capacity Development Technologies

https://taat.africa/qtg

ABOUT US

TAAT

TAAT, Technologies for African Agricultural Transformation, is an African Development Bank initiative to boost agricultural productivity by rapidly rolling out proven technologies to more than 40 million smallholder farmers.

TAAT aims to double crop, livestock, and fish productivity by 2025 by engaging both public and private sectors to expand access to productivity-increasing technologies across the continent.TAAT advises African government who receive funding from international financial institutions such as the African Development Bank to help them integrate the best agricultural technologies in their development projects. TAAT also offers technical assistance for the integration of these technologies, when needed.

TAAT Technologies

TAAT definition of agricultural technologies is very broad: they include improved varieties, inputs, equipment, agricultural infrastructure, practices and agricultural policies. In short, any solution to an agricultural constraint. TAAT technologies have been developed by a wide variety of organizations: the CGIAR, other international research institutions, national research organizations, or the private sector.

TAAT Clearinghouse

Within TAAT, the Clearinghouse has the remit to select, profile and validate agricultural technologies, and showcase them in online catalogs to support the advisory role that the Clearinghouse offers to governments and the private sector. The Clearinghouse strives to be an 'honest broker' of technologies through its selection, profiling, validation and advice.

TAAT e-catalogs

The e-catalogs are designed to be used by decision-makers within governments, private sector companies or development organizations. They facilitate the search for appropriate solutions that are adapted to local conditions and requirements, and provide all necessary information, presented in jargon-free and easy to analyze technology profiles. Once a decision-maker has selected a technology of interest, the e-catalogs facilitate their direct contact with those who can help them implement the technology, whether they are a research group or a private company.

TAAT Technology Toolkits

Technology toolkits are hand-picked selections of technologies from the TAAT e-catalogs. We offer some curated toolkits for specific cases, and registered users can create their own toolkits, showcasing their selection of technologies. Toolkits can be used online and shared as links, as mini e-catalogs, they can also be downloaded, saved, shared or printed as collections of technology pitches in PDF format (pitches are one-page summaries of technology profiles, available for all technologies on the e-catalogs).

AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE DE DÉVELOPPEMENT

Technologies for African Agricultural Transformation

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