



SeedTracker: Digital tool for Strengthening Seed Governance and Certification Systems





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Commodities

All Crops

Sustainable Development Goals









Pre-production, Digital applications, Supply chain management, Advisory and information service. + 0 more



Where it can be used

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



Target groups

Breeders, Seed companies, Researcher center.

Advisory and Extension Services

Build an efficient seed system!

SeedTracker is a web- and mobile-based application designed for national and decentralized seed system management. It enables registration of seed producers and fields, records inspection activities, provides real-time access to certification status, and generates georeferenced data for decision-making. It works offline and in multiple languages, making it suitable for rural deployment. Regulatory agencies can use it to oversee field activities remotely, support decentralized certification, and build national seed databases.



This technology is <u>pre-validated</u>.



Gender assessment



Climate impact



Problem

- Fragmented seed certification systems: Many countries still rely on paper-based, decentralized systems, making it difficult for regulators to ensure compliance and quality.
- Limited oversight in rural areas: National agencies struggle to monitor seed activities in distant communities.
- · Lack of traceability: Seed lots cannot be tracked once they leave the farm, weakening accountability.
- Weak data systems: Planning for seed demand, pest outbreaks, and variety deployment is limited due to poor data availability.

Solution

- · Centralized certification and registration system: Allows regulators to digitally record and validate seed field inspections and certification at
- · Remote monitoring of decentralized production: Local inspectors enter data that national authorities can access and verify in real
- Digital traceability: Tracks each seed lot from registration to sale, helping prevent fraud and improving transparency.
- Georeferenced seed data: Provides evidence for better planning, resource allocation, and response to seed system gaps.

Key points to design your project

The SeedTracker technology ensures traceability and quality assurance for cassava planting materials, enhancing smallholder farmers' access to high-quality, climate-resilient varieties.

- · It supports national priorities on climate resilience, gender inclusion, and SDGs, empowering governments to make data-driven decisions.
- Key activities include stakeholder mobilization, capacity building, digital certification integration, real-time monitoring, and impact tracking. A toolkit with training materials and dashboards is available to support implementation.

5,000 USD

Minimum cost

Not yet estimated



No formal IP rights



https://e-catalogs.taat-africa.org/gov/technologies/seedtracker-digital-tool-for-strengthening-seedgovernance-and-certification-systems Last updated on 24 April 2025, printed on 24 April 2025