

# Waxing of fresh cassava roots to extend the shelf-life and increase marketability



Extend shelf-life of fresh cassava

The waxing technology for cassava roots starts from careful cultivation to produce commercially acceptable roots. Before harvest, leaves are pruned to prevent damage. After harvest, roots are sorted, washed, weighed, disinfected, and dried at a pack-house. Finally, a food-grade wax is applied to extend their shelf-life.



This technology is **TAAT1 validated**.



Scaling readiness: idea maturity: 7/9; level of use: 7/9

**126 USD/ton**

total cost for waxing

**32 %**

Marginal rate compared to unwaxed roots

**3,000–5,000 USD**

Estimated investment cost for an “all-inclusive” packhouse or processing centre, including water supply



Open source / open access

## Problem

- **Deterioration:** Cassava roots deteriorate rapidly post-harvest.
- **Marketability:** Their size, shape, and harvest damage affect marketability.
- **Food Security:** Short shelf-life limits availability, affecting food security.

## Solution

- **Preservation:** Waxing extends freshness and protects cassava roots.
- **Shelf-life:** It significantly extends the roots' shelf-life.
- **Food Security:** The technology enhances food security by ensuring longer availability of cassava roots.

## Key points to design your business plan

For farmers in Africa looking to implement cassava root waxing:

1. **Investment:** Prepare for an investment cost of \$3,000-5,000 for a packhouse and basic tools.
2. **Materials:** Procure locally available wax (\$12.5/ton roots) and preservative (Thiabendazole, if approved).
3. **Packhouse Construction:** Build a packhouse for processing and distribution.
4. **Packhouse Operations:** Learn to manage operations like weighing, sorting, washing, disinfecting, drying, waxing, and packing.
5. **Training:** Undergo training on the entire process from field preparation to post-harvest handling.
6. **Expansion:** Plan for future expansion or upgrade of the packhouse as the business grows.

Remember, careful planning, execution, and adherence to recommended practices are key to ensuring the quality and safety of the cassava roots.

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Technology from

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Commodities

Cassava

Sustainable Development Goals



Categories

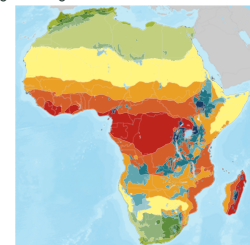
Prevention & storage, Practices, Post-harvest management

Tested/adopted in



Where it can be used

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



Target groups

Farmers

Gender assessment



Climate impact



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Enquiries [e\\_catalogs@taat.africa](mailto:e_catalogs@taat.africa)