

Mechanized Cassava Planting and Harvesting

Empowering Cassava Farmers: More Yield, Less Labor, Better Quality



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Mechanized cassava planting and harvesting technology is a specialized equipment of two-row planters and harvesters, typically operated by tractors. This technology improves the efficiency of cassava farming by reducing labor requirements.

This technology is **TAAT1 validated**.

8·7
 Scaling readiness: idea maturity 8/9; level of use 7/9

Project adoption 1
Technology integrated in the ENSURE project.

Inclusion assessment **4**

Climate impact **7**

Technology from
ProPAS

Commodities
Cassava

Sustainable Development Goals

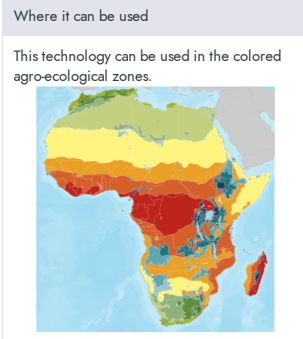
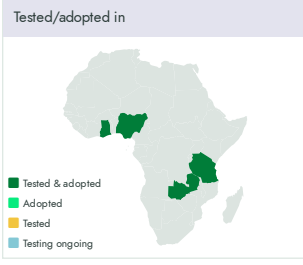
Problem

- Low cassava yields (10 t/ha) compared to global competitiveness (minimum expected yield of 25 t/ha).
- Labour-intensive and time-consuming planting and harvesting operations.
- Lack of mechanization and use of modern agricultural technologies in cassava production.

Solution

- Increase productivity and efficiency in cassava farming. The yield from mechanically managed farm could increase by 38% over the yield in the manually managed farm.
- Reduce production costs associated with manual labor.
- Improve competitiveness of the cassava sub-sector by enhancing productivity and reducing costs through mechanized operations.

Categories
Production, Equipment, Land preparation



Target groups
Farmers

Key points to design your program

Mechanized Cassava Planting and Harvesting modernizes cassava production by replacing labor-intensive manual operations with efficient mechanized planting and harvesting services. Suitable for agricultural modernization, rural mechanization, and agro-industrialization programmes, the technology contributes to **SDGs 2 (Zero Hunger)** and **13 (Climate Action)** while creating employment and entrepreneurship opportunities in mechanization service delivery. To successfully integrate this technology, consider the following key actions:

- Target cassava-producing areas where limited access to mechanization constrains productivity and commercialization.
- Establish partnerships with IITA, mechanization service providers, research institutions, extension services, and private equipment suppliers to support implementation and technical supervision.
- Develop regional mechanization hubs, strengthen operator capacity, and facilitate access to planting and harvesting services through sustainable business and financing models.
- Combine mechanized operations with improved cassava varieties and good agronomic practices, while monitoring service utilization, productivity improvements, and programme outcomes.

13 USD/ha
Cost of mechanized planting

25 USD/ha
Cost of mechanized harvesting

IP
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