

Value-added Processing of Bananas and Plantain

Banana and Plantain Processing for a Healthier Diet

This technology involves the processing of bananas (ripe or unripe) into valuable products like flour, purees, and chips. Unripe fruits are dried and ground into flour (good for baking!), while ripe ones are pulped for drinks and snacks. The technology works for small or large-scale production.



Banana flour has a growing demand as a wheat substitute



This technology is **TAAT1 validated**.



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

1,500 USD

Banana flour production machinery that can process 100 kg per hour

10000—60000 USD

Equipment for the automatic production of fried banana chips (100-500 kg/hour)

1,500 USD

Commercial presses for producing banana pulp (0,5 ton/hour)



Open source / open access

Problem

- **Postharvest Losses:** Bananas and plantains are perishable crops, prone to rapid deterioration after harvest, resulting in significant losses.
- **Unattractive Appearance:** Traditional flour processing can yield a brownish color, which may not be appealing to consumers.

Solution

- **Extended Shelf Life:** Processing like flour production and pulping creates longer-lasting banana and plantain products, reducing waste.
- **Enhanced Flour Quality:** Blanching and special soaking techniques improve flour color and functionality for baking and food production.

Key points to design your business plan For Processor

Equipment

Choose equipment based on the products you plan to make. For banana chips: slicer, fryer, deoiler, packaging machine. For banana flour: peeling machine, slicer, blanching and soaking machine, dryer, grinding machine, packaging machine.

- Banana pulp presses: \$1,500 (0.5 ton/hr) to \$4,000 (2.5 tons/hr)
- Banana flour machinery: \$15,000 (100 kg/hr) to \$300,000 (5 tons/hr)
- Fried banana chips production: \$10,000 to \$60,000

Raw Material Source

Ensure high-quality, disease-free bananas and plantains, sourced locally or imported if needed.

Potential Customers

Target food manufacturers, bakeries, confectioneries, cosmetic and pharmaceutical companies. Explore niche markets like banana wine and banana-based cosmetics.

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Technology from

ProPAS

Commodities

Banana/Plantain

Sustainable Development Goals



Categories

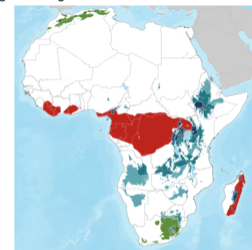
Transformation, Equipment,
Post-harvest handling, Agri-food processing

Tested/adopted in



Where it can be used

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



Target groups

Processors

Gender assessment



Climate impact



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<https://taat.africa/dqw>

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