

Induced Ripening of Banana for Increased Marketability and Storage

Ripening Solutions for Quality and Efficiency

The Induced Ripening of Banana for Increased Marketability and Storage technology is a method designed to enhance the ripening process of bananas, specifically to ensure they are market-ready and have an extended shelf life. In this process, bananas are artificially ripened using various chemical agents, most notably ethylene gas.



*Industrial ripening chamber
with refrigeration and gas
control (Credit: Nilkamal)*

✓ This technology is **TAAT1 validated**.

8·8



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

Cost: \$\$\$ **3,500 USD**

Constructing artisanal chambers

17,000 USD

Industrial semi-automated ripening chambers of 5 tones of banana



Trademark

Problem

- Bananas, especially plantains, suffer significant post-harvest losses due to transportation damage and spoilage.
- Traditional ripening methods, such as wrapping banana bunches with green leaves, are time-consuming and result in non-uniform ripening.
- Consumers prefer ready-to-eat bananas, and fruit sellers need a consistent supply of ripe fruit to meet this demand.

Solution

- Artificial ripening with ethylene gas ensures that bananas are ready for the market, reducing the risk of post-harvest losses due to transportation damage or spoilage.
- The technology allows for the acceleration or slowing down of the ripening process based on market demand, optimizing the supply chain.
- The technology meets consumer demand for ready-to-eat bananas, benefiting both fruit growers and sellers.

Key points to design your business plan

The technology of Induced Ripening of Bananas for Increased Marketability and Storage provides a cost-effective solution to enhance banana marketability and storage for farmers.

Steps to integrate this technology include:

- Market assessments, business planning, investment in ripening chambers,
- consideration of operational costs, and compliance with regulations.
- Available in various countries, it's essential to factor in potential duty fees during planning.

Gender assessment



Climate impact



International Institute of Tropical Agriculture (IITA)

Patchimaporn Udomkun

Technology from

ProPAS

Commodities

Banana/Plantain

Sustainable Development Goals

2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



8 DECENT WORK AND ECONOMIC GROWTH



Categories

Prevention & storage, Equipment, Post-harvest handling

Tested/adopted in



- Tested & adopted
- Adopted
- Tested

Where it can be used

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



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<https://e-catalogs.taatafrica.org/com/technologies/induced-ripening-of-banana-for-increased-marketability-and-storage>

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