TAAT e-catalog for private sector

Raised beds for sweet potato production and weed management



International Potato Center (CIP)

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Technology from

ProPAS

Commodities

Sweet Potato

Sustainable Development Goals





Categories

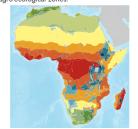
Production, Practices, Weed management

Tested/adopted in



Where it can be used

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



Target groups

Farmers

Raise tuber yields with raised beds

The raised bed technology elevates sweet potatoes for better growth. By creating designated areas with loose soil, it prevents soil compaction and weed growth, ensuring optimal nutrient absorption. This method is beneficial in areas with poor soil quality, promoting healthier crops and easier maintenance for farmers.



This technology is **TAAT1** validated.

7.7

🛌 Scaling readiness: idea maturity:

(Cost: \$\$\$) **584** USD

7 % Fresh tuber weight increased

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Open source / open access

Problem

• Uncontrolled weeds compete with sweet potatoes, reducing yields and stunting growth.

Installation of raised beds per acre

- Traditional methods can lead to poor root development and tuber growth.
- These diseases can devastate sweet potato crops, leading to lower yields and economic losses.
- · Manual weeding diverts resources from other crucial activities.

Solution

- · Elevates sweet potato plants, creating ideal conditions for tuber development. Prevents soil compaction and waterlogging, ensuring healthy
- It provides an environment hostile to soil-borne diseases, fostering healthier crops and minimizing disease-related losses.
- · It maximizes tuber yields by maintaining optimal soil conditions, reducing dependency on external inputs and manual labour.

Key points to design your business plan

Utilizing raised beds for sweet potato production promotes sustainable farming with increased crop yield. To implement this technology effectively:

- · Assess farm suitability based on soil type and climate, and select appropriate sweet potato varieties.
- · Obtain necessary tools and materials like hand hoes, harrows, or mechanical plows, mineral fertilizer, compost, and optional chemical control agents.
- Consider the cost structure, which includes installation expenses like mechanized plowing, soil disinfection, fertilizer input, and irrigation, along with additional costs for covering soil beds with plastic sheets or mulching with plant litter.

Gender assessment



Climate impact



