Tent-style greenhouse for multiplication of sweet potato vines and cuttings

Greenhouse Solutions for Thriving Sweet Potato Farms

The tent-style greenhouse, built with local materials and screen nets, provides an optimal, pest-free environment for sweet potato vines. It maintains soil moisture and ensures the production of high-quality, disease-free planting material. This cost-effective and easy-to-assemble technology is a practical tool for farmers to increase sweet potato yield.

International Potato Center (CIP)
Paul Demo

This technology is TAAT1 validated.

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

Gender assessment 4

Climate impact 6

Problem

- **Planting Material**: Shortage and degradation over time.
- **Pests/Diseases**: Susceptibility impacting crop health and yield.
- **Infrastructure/Cost**: High costs and local material availability issues.

Solution

- **Efficient Production**: Multiplication of healthy vines and cuttings.
- **Pest/Disease Control**: Screen nets for a pest-free environment.
- **Cost-Effective**: Built with cheaper, locally available materials.

Key points to design your project

The tent-style greenhouse technology bolsters climate resilience, optimizes resource use, and aligns with SDGs like Zero Hunger and Climate Action.

For farmer adoption, the project activities include:

1. **Training**: Educate farmers on the greenhouse benefits and operation.
2. **Site Preparation**: Assist in location selection and site preparation.
3. **Construction**: Guide through greenhouse assembly and screen net installation.
4. **Arrangement**: Train on plant arrangement inside the greenhouse.
5. **Maintenance**: Teach soil moisture maintenance and temperature control.
6. **Feedback**: Evaluate technology effectiveness and gather farmer feedback.

The timeline depends on the farmers' specific context and needs.

Cost: $$$ **7.66 USD**
total investment per square meter

ROI: $$$ **56 %**
over 3 year

4-9 USD
sales of vines per square meter

IP
Open source / open access

Technology from

ProPAS

Commodities

Sweet Potato

Sustainable Development Goals

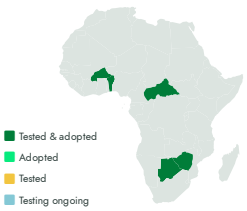
Categories

Production, Equipment, Seed system

Best used with

- Orange-Fleshed Sweet Potato (High provitamin A) ›

Tested/adopted in



Where it can be used

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