

# Multi-Crop production system Intercropping Strategies for Banana and Plantain

Improved system production for better yield

Intercropping, growing bananas or plantains alongside other plants, offers farmers numerous benefits but also poses challenges like nutrient competition, disease spread, and careful handling during planting and harvesting to avoid root damage.



This technology is [TAAT1 validated](#).



Scaling readiness: idea maturity:  
5/9; level of use: 7/9



Open source / open access

## Problem

- Competition for nutrients and water
- Weed proliferation
- Soil degradation and erosion
- Vulnerability to pests and diseases
- Dependency on external inputs
- Susceptibility to extreme weather
- Loss of biodiversity

## Solution

- Allows for early yields before banana crops, while suppressing weeds.
- Canopies and roots protect against soil erosion.
- Legume intercrops provide nitrogen through biological fixation.
- Biomass from intercrops serves as mulch and organic nutrients.
- Intercropping diversifies farmers' income sources.
- Reduces disease spread, Enhances soil health.
- Strengthens food systems' resilience....

## Key points to design your business plan

Utilizing Intercropping Strategies for Banana and Plantain enhances farmer income, food security, and sustainable agriculture by diversifying crops, reducing chemical usage, and promoting biodiversity.

To effectively implement this technology, farmers require education, access to information, high-quality seeds, ongoing extension support, affordable inputs, and partnerships for distribution.

No licenses are needed, and integration with complementary technologies can optimize outcomes.

Gender assessment



Climate impact



Banana with common bean understory  
(Credit: B. Dhed'a)



International Institute of  
Tropical Agriculture (IITA)  
Godfrey Taulya

Technology from

ProPAS

Commodities

Banana/Plantain

Sustainable Development Goals



Categories

Production, Practices, Weed management,  
Soil fertility

Best used with

- [Biofortified Beans for Improved Nutrition >](#)
- [Orange-Fleshed Sweet Potato \(High provitamin A\) >](#)
- [Disease resistant cassava varieties >](#)
- [New rice for Africa varieties >](#)

Tested/adopted in



Where it can be used

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



## Multi-Crop production system

<https://e-catalogs.taat-africa.org/com/technologies/multi-crop-production-system-intercropping-strategies-for-banana-and-plantain>

Last updated on 22 May 2024, printed on 22 August 2024

Enquiries [techs@taat-africa.org](mailto:techs@taat-africa.org)