

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.



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

IITA
Transforming African Agriculture

**International Institute of
Tropical Agriculture (IITA)**
Godfrey Taulya

Technology from

ProPAS

Commodities

Banana/Plantain

Sustainable Development Goals



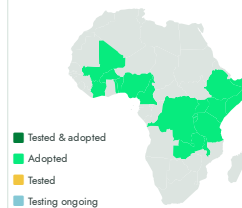
Categories

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 >](#)
- [High yield rice varieties for Africa >](#)

Tested/adopted in



Where it can be used

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



This technology is **TAAT1 validated**.

5/7



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

Gender assessment

4

Climate impact

7

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 project

To integrate Intercropping Strategies for Banana and Plantain into your project, follow these steps:

1. Educate farmers about the benefits, emphasizing increased productivity and reduced chemical use.
2. Provide tailored extension support for variety selection and best practices.
3. Facilitate seed production and ensure accessibility of inputs.
4. Allocate funds for training and ongoing support.
5. Develop communication materials to promote adoption.
6. Establish partnerships with farmers.
7. Consider integrating with other complementary technologies for optimal results.



Open source / open access



Multi-Crop production system

<https://taat.africa/asc>

Last updated on 22 May 2024, printed on 15 May 2025

Enquiries e-catalogs@taat.africa