

Improved Varieties of Plantain for Tropical Lowlands

Better Plantain Varieties for Thriving Farmers

The "Improved Varieties of Plantain for Tropical Lowlands" makes stronger and healthier plantains that can resist diseases and pests. It does this by mixing different kinds of plantains to create new varieties. These special plantains grow well in different climates and have more leaves and fruits.

This technology is **TAAT1 validated**.

8·8

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

Project adoption 1
 Technology integrated in the ENSURE project.

Inclusion assessment **3**

Climate impact **7**

Problem

- Black leaf streak disease causing significant yield losses ranging from 33% to 50%.
- Weevils and nematodes undermining corm and root systems.
- Declining soil fertility due to poor management practices.

Solution

- This technology aims to combat black leaf streak disease, weevils, and nematodes.
- Focus on high productivity and drought resilience to mitigate yield losses.
- Emphasis on preferred cooking traits to meet consumer preferences.
- Adaptation to diverse climatic and production conditions.

Key points to design your program

Improved Plantain Varieties for Tropical Lowlands increase plantain productivity by replacing disease-susceptible traditional varieties with high-yielding hybrids adapted to diverse production environments. Suitable for food security, poverty reduction, climate resilience, and sustainable agricultural development programmes, the technology contributes to **SDGs 1 (No Poverty), 2 (Zero Hunger), 3 (Good Health and Well-being), 8 (Decent Work and Economic Growth), and 13 (Climate Action)** while strengthening access to quality planting materials, improving farmer livelihoods, and supporting resilient plantain value chains. To successfully integrate this technology, consider the following key actions :

- Target plantain-growing areas affected by black leaf streak disease, weevils, nematodes, declining soil fertility, and low productivity.
- Establish partnerships with IITA, research institutions, tissue culture laboratories, nursery operators, extension services, and farmer organizations to strengthen the production and dissemination of quality planting materials.
- Support certified planting material systems, promote integrated crop, soil fertility, and pest management practices, and strengthen farmer and nursery operator capacity through demonstrations and extension services.
- Monitor planting material distribution, technology adoption, plantain productivity, disease incidence, farmer income, and programme outcomes.

1400 USD IP
 Production inputs and labor per ha Open source / open access



International Institute of Tropical Agriculture (IITA)
 Moses Nyine

Technology from
ProPAS

Commodities
 Bananas & plantains

Sustainable Development Goals

Categories
 Production, Improved varieties, Disease resistance, Insect resistance
 + 0 more

Best used with
 In-Vitro Banana Tissue Culture Propagation, Propagation of Banana and Plantain Disease-Cleaned Suckers, Intercropping Strategies for Banana and Plantain, Spacing and Stand...
 See all 6 technologies online



