

# LIFE Plant Biostimulants: Approach to produce microbial fertilizers

Bio-stimulant for free smallholders' access to biofertilizers to support enhanced plant yields!

Lactobacillus Serum and Fish Hydrolysate are organic microbial fertilizers that enhance soil health, nutrient absorption, and crop productivity. These biostimulants, rich in amino acids, improve plant growth while being classified differently across countries based on regulatory frameworks.



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solutions for a better world

**Lifeworks Global**  
Paul Manweiler

Commodities

Vegetable crop

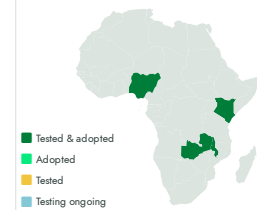
Sustainable Development Goals



Categories

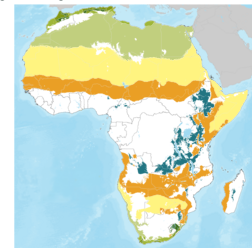
Pre-production, Inputs, Fertilizer

Tested/adopted in



Where it can be used

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



Target groups

Farmers, Manufacturers

**⚠️ This technology is not yet validated.**

**5-6**



Scaling readiness: idea maturity 5/9; level of use 6/9

Gender assessment

**4**

Climate impact

**6**

## Problem

- **High Fertilizer Costs:** Smallholder farmers struggle to afford synthetic fertilizers, reducing their ability to optimize yields.
- **Declining Productivity:** Limited access to fertilizers results in suboptimal applications, leading to reduced agricultural productivity and lower yields.
- **Soil Degradation:** Prolonged use of synthetic inputs depletes soil health.

## Solution

- **Boosts Productivity:** Enhances nutrient availability and crop growth, leading to higher yields and sustainable production systems.
- **Improves Stress Resilience:** Strengthens plants against drought, temperature extremes, nutrient imbalances, and other climate-induced stresses.
- **Promotes Soil Health:** Restores soil pH, increases organic matter, enhances microbial diversity, and supports nutrient cycling.

## Key points to design your project

Lifeworks Global's Plant Biostimulants technology enhances crop productivity, improves soil health, and boosts resilience to climate change. With rising fertilizer costs, biostimulants offer an affordable alternative, especially for smallholder farmers.

Key activities for adoption include:

- **Farmer training** on biostimulant application methods (seed soaking, foliar feeding, root drenching).
- **Capacity building** through the Training of Trainers (ToTs) model for local production.
- **Communication support** to raise awareness (flyers, videos, radio broadcasts).
- **Collaboration** with agricultural organizations for widespread adoption.

This technology, paired with resilient crop varieties and soil fertility enhancement practices, promotes sustainable agriculture, food security, and improved farm productivity.

**300 USD**

Process cost

**66.7 %**



No formal IP rights



**LIFE Plant Biostimulants**

<https://taat.africa/jfi>

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