



# EcoCycle Larvae System: Black Soldier Fly Larvae (BSFL) proteins for low cost Fish feeds




BSFL proteins for sustainable local fish and chicken feed production

BSFL composting is a biological method that uses Black Soldier Fly larvae to break down organic waste like food scraps and manure. The process produces nutrient-rich larvae for animal feed and a compost by-product called frass.

 This technology is **validated**.

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

Inclusion assessment  **4**

Climate impact  **7**

## Problem

- Fish and poultry farming in sub-Saharan Africa face inconsistent and unreliable year-round feed supplies.
- The feed prices significantly increase production costs, making it difficult for fish farmers to sustain operations.
- 30-40% of food and organic is wasted, resulting in to negative environmental impacts, such as pollution and resource depletion.

## Solution

- Using BSFL to decompose organic waste provides a sustainable way to waste and reduce environmental harm.
- BSFL technology produces nutrient-rich larvae that can be used as a low-cost feed for fish and poultry.
- Encouraging the adoption of BSFL technology supports a circular economy model that fosters long-term economic stability and environmental protection.

## Key points to design your program

Transforms organic waste into affordable, high-protein livestock feed and nutrient-rich compost. To integrate this technology in programs:

- Creates jobs and income opportunities in waste management, insect farming, and feed production.
- Requires capacity building: training on larvae rearing, waste handling, and feed processing.
- Enables partnerships with waste management firms, agricultural groups, and government for greater impact.

**1,000—2,400 USD**

Small BSFL composting system

**375—1,040 %**

Return on investment



Unknown

Commodities

Fish

Sustainable Development Goals



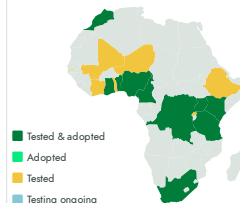
Categories

Pre-production, Inputs, Animal healthcare

Best used with

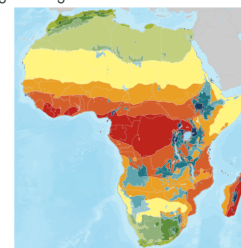
Fast Growing and Hybrid African Catfish, Cage Systems for Fish farming, Tank Systems for Fish farming, Organic fertilizer for soil improvement  
See all 4 technologies online

Tested/adopted in



Where it can be used

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



Target groups



EcoCycle Larvae System

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