



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





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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

#### Tested/adopted in



#### Where it can be used

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



Target groups

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.









Unknown

### **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
- 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
- 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 business plan

- · Manufacturers can utilize BSFL Composting Technology to create low-cost, high-protein feed from organic waste, with initial setup costs ranging between 1,000 and 2,400 USD for composting bins, larvae sourcing, and essential equipment.
- Resellers play a crucial role in distributing the feed to livestock farmers, with key costs including purchasing, transportation, storage, and marketing.
- For users, the technology offers affordable feed, reduced environmental impact, and improved farm productivity, with the main expenses being the purchase of feed and farm operational costs.

Inclusion assessment



Climate impact

