CGIAR

BSFF: Organic fertilizer for soil improvement

Low cost fertilizer for healthy and profitable agriculture for African farmers.

Frass is a nutrient-rich compost produced from black soldier fly larvae (BSFL) treatment of biodegradable waste. Commercially, it consists of BSFL faeces, substrate residues, exoskeletons, and a microbial population aiding fermentation.



Problem

Gender assessment

• Africa faces a lack of organic waste management solutions, leading to severe environmental threats.

4

This technology is **pre-validated**.

 Soil fertility in smallholder farms is declining due to nutrient imbalances, where more nutrients are extracted than replenished, worsening food security.

Solution

Climate impact

• BSFF technology converts organic waste into nutrient-rich compost, reducing environmental contamination and improving soil fertility.

47

• It promotes sustainable agricultural practices by enhancing soil health.

Key points to design your project

To integrate the BSFF technology into your project:

- Educate Farmers: Raise awareness among farmers about the benefits of using BSFF fertilizer for improving crop yields and soil health.
- **Promote Accessibility**: Ensure equitable access to BSFF products and financial support for local suppliers and smallholder farmers.
- **Calculate Fertilizer Needs**: Determine the required quantities of BSFF fertilizer, considering a recommended application rate of 10 tons per hectare for poor soils.





Target groups Farmers



BSFF https://e-catalogs.taat-africa.org/gov/technologies/bsff-organic-fertilizer-for-soil-improvement Last updated on 21 March 2025, printed on 21 March 2025