

# INSBIZ: INSect-based agriBIZness for sustainable grasshopper and cricket production and processing for food in Kenya and Uganda

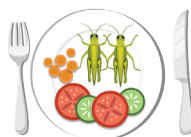
## Preamble

With a rapidly growing human population, the demand for animal and plant protein has radically increased, creating pressure on the food value chain in the face of depleting land and water resources. An estimated 827 million people in developing regions, most of them in Africa, suffer undernourishment. The situation is expected to worsen, unless efforts are made to reverse food and nutrition insecurity. Protein-rich edible insects are increasingly being viewed as viable and sustainable alternatives to animal and plant proteins for improved food and nutritional security, and they

already supplement the diets of more than 2 billion people worldwide. In East Africa, the most consumed insects include crickets, grasshoppers, locusts, and termites, all of which are highly nutritious and easily accessible. However, consumption relies on wild harvesting, meaning that demand far outweighs supply, and handling is generally unhygienic. The few good quality packaged insect food products available on the market are costly due to the seasonality and unpredictability of wild harvest.



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## The technology

This project aims to fine tune rearing techniques of the longhorn grasshopper and house/field crickets, adapt these techniques to farmer field conditions, and scale up the technology to ensure year-round market supply for safe production and packaging. Resulting products can either be whole insects, or powders to enrich other foods and flours. Two private company collaborators are already commercializing fortified cookies and infant porridge flour.

The INSBIZ project will contribute to improved food and nutritional security, job creation and income generation for the most vulnerable groups in East Africa in general, and Kenya and Uganda specifically, through insect production and processing.

## Local and regional benefits



Harmonized standards on the use of insects as food and feed. These include process and product standards, protocols on good manufacturing practices, and codes of practice that resolve non-tariff barriers that could propel insect-based food and feed products into regional niche markets where they would fetch premium prices



New food products using insects as alternative protein sources



An all year-round production of insects, which supplement diets and hence reduce protein, energy and micronutrient deficiency among people (especially children and women of reproductive age) consuming the insects.

### Project leader

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### Project partners

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