







Optimizing Mushrooms Value Chain Benefits for Better Livelihood and Environmental Protection among Smallholders and SMEs

Preamble

Mushroom production in East Africa has been unstable for decades with huge gaps along the value chain, particularly weak market linkages, poor access to and availability of the product, lack of standard packaging and measurement, and minimal value addition to the product. All these issues combined limit mushroom production and sales in both local and international markets.

Despite these challenges, cultivation of mushrooms offers a thriving solution. Mushrooms are currently the best economical biotechnology for Lignocelluloses organic waste recycling, since production of this protein and nutrient-rich food and reduction of environmental pollution are combined. In addition to job creation and improving income, other upsides of mushroom cultivation include no-fuss technology, low capital investment and little space to plant required.

This project addresses multiple gaps and challenges in the mushrooms value chain, specifically access to quality substrate material, value addition, and bio-waste conversion.

CHALLENGES IN MUSHROOM CULTIVATION





Weak market linkages



Lack of standard packaging and measurement



Minimal value addition

unavailability of the product,



The technology

In collaboration with the Tanzania Industrial Research and Development Organization (TIRDO), this project will create, disseminate, and scale up standardized substrate blocks which will be marketed under the brand name OKOA, meaning 'save' in Swahili, for sale to mushroom farmers who do not have the time, skills and/ or physical capability needed to establish a fully functional mushroom enterprise.

Traditional mushroom cultivation requires collection of substrate materials, mixing, packing, and pasteurization,

among other activities. This long and tedious process is one of the major reasons mushroom farming is abandoned, or not taken up at all. Ready-to-use OKOA substrate blocks not only reduce labour time by 36 hours, but they also encourage mushroom production by women, old-age growers, and people without the time and physical capability to take part in substrate collection, mixing and packing.

OKOA substrate blocks are made from bio-waste, have adequate moisture content, and have a long shelf life.

Local and regional benefits

This project aims to create links and fill gaps along the mushroom value chain, by targeting small and medium scale entrepreneurs in Tanzania and Rwanda to improve their production, processing, and marketing efficiency. To achieve this, the project will:



Large scale production of OKOA substrate blocks for improved mushroom cultivation and yields.



To improve SMEs institutional system setups and structures for substrate innovation, production, marketing, and use.



To introduce Shiitake Mushroom variety in Tanzania as a model output from OKOA substrate.

Project leader

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Project partners

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