



IDEAS
— For Us —
IDEAS For Uganda
Vertical Micro Garden Proposal

Primary Contact

General Email: Uganda@IDEASforus.org

Branch Leaders:

Sinamakosa Isaac - sinamakosa@ideasforus.org

Masereka Adidas - masereka@ideasforus.org

Matovu Castor - matovucastor@rocketmail.com

Project Summary

In the past, Vertical Micro Gardening (VMGs) projects fostered by IDEAS For Uganda have led to substantial improvements in the food pillar of urban communities. The prosperity created from past VMGs calls for a necessary expansion of this food security project in Uganda. Thus, IDEAS For Uganda is seeking monetary support for 200 Vertical Micro Gardens that will be distributed in low income households by May of 2020. The mission behind this project is to empower urban communities in Kampala, Wakiso and Kasese to grow their own food year round, through the production and distribution of Vertical Micro Gardens!

About the Vertical Farm:

A Vertical Farm is an integrated vertical gardening and composting system that creates 36 sq ft of soil with only a 3' x 3' footprint. In essence a "farm in a box" that utilizes compost from biodegradable urban waste, and is capable of growing up to 200 plants. This integrated unit has a vermicomposting core that supplies highly nutritious soil to several levels of plantable area, where a variety of crops can be grown in an agroecological and organic manner, working in harmony with one another to produce higher yields with more nutrients.

Measurable Objectives

- Provide 200 VMGs at no cost to 200 low income households
- Produce nutritious crops in a 3' x 3' could amount for up to 27% of participants annual income
- Compost 28,800 kgs of biodegradable municipal waste by December 2020
- Distribute 400 kgs of earthworm breeding stock (2kgs per VMG) by May 2020
- 2400 kgs of earthworms raised by beneficiaries by the end of April 2020

Project Background

It is estimated that by 2030 nearly 50% of the world's population may live in urban areas. Consequently, many millions of acres of productive farmland are expected to be lost to housing and industrial usage. In Uganda, the lack of appropriate farmland, low incomes, unemployment, and natural disasters have resulted in very poor food security. This makes the country's chances of halving poverty and hunger by 2030 very slim. Uganda and other African countries need to increase agricultural productivity in a sustainable manner through innovative approaches, particularly in dense urban areas.

On top of this, Kampala is facing a major issue with urban waste management, where nearly 28,000 tons of waste are delivered to city landfills each month. However, according to the Kampala Capital City Authority,

this represents only 40% of the waste generated in the city. The rest ends up in unauthorized sites. Often on city streets and in dense urban areas, causing significant environmental and human health problems.

So in 2014, a group of students at the Makerere University chapter of IDEAS For Uganda, led by Mr. Paul Matovu, developed an innovative approach to urban micro-gardening and integrated waste management in Kampala, a social enterprise called “Vertical Micro-Gardening” (VMG), the first of its kind in Uganda.

Desired Outcomes

Overall, the average monthly cash income for Ugandans in 2016/17 was UGS 416,000. IDEAS for Uganda expects to see VMGs beneficiary households harvest at least \$355 worth of produce per year from a single households garden. This would amount to about 27% of an average household yearly income. Climate-smart vertical gardens will improve cities’ and municipalities’ food security at a small cost. Allowing households to place time, energy, and money on other pressing issues such as sanitation or health care.

Additionally this project would assist in the composting of over 28,800kgs of municipal waste that would otherwise end up in landfills. We are setting a target to utilize about 30% of compostable urban waste within Kampala, Wakiso and Kasese by end of 2020. Consequently, each household would be saving at least \$20 a year that was normally being paid to the city council as a waste collection fee.

Altogether, this project aims to provide an inexpensive opportunity for food security. This plan allows for the education of sustainability farming methods which are less costly to the environment than conventional farming. Ultimately strengthening the resilience of urban and rural–urban Ugandans by building their capabilities to harness their resources sustainably.

Budget Breakdown

Item description	Unit cost in USD	Quantity	Total Cost in USD
Earthworm breeding stock	19	200	3,800
Cost of Vertical Farms (Fully Planted with seedlings and Soil)	137	200	27,400
User Manual	1.4	200	280
Agricultural Extension Services	8	200	1,600
TOTAL			\$33,080

Sources

<https://observer.ug/business/55252-subsistence-farming-tops-local-sources-of-income.html>