

Vertical Gardening by Biogas International Limited Company



Why to choose this solution?

The solution helps in promoting or supporting food security since its for pure food production in vegetables, fruits, herbs plus any other food crop that can grow in it. It is easier to make, install, plant in, manage and replicate anywhere and everywhere needed. It is practical everywhere and anywhere in the rural, urban area, rocky areas, hills, flat areas and swampy areas. It is economical since it requires small piece of land to set up, its low labour intensive and less time is spent on it. It has high quantity harvest with high quality produce in a smaller area as compared to the direct ground ploughing. The technology is aimed at improving organic farming and less water usage helping in improving soil quality. The technology is part of the solid waste management since the organic wastes are used to make organic manure for nutrients replenishing.

Savings per day or production:

For the families using the technology save at least KSH 60 per day for vegetables purchase. Such amount can be saved and be used for other development purposes. It is also a source of income for many families.

Cost in money and in own time to construct:

It is less costly to set up, and cost depends on the size, its easily expandable and also less labour intensive and less time spent in setting up and maintaining them. This is because it is simply entails setting up the vertical gardens, soil and compost manure. Then filling up the garden, followed by planting, uprooting the weeds with hands and watering the plants.

Lifetime:

Over 20 years, since its a plastic of more than 0.75 mm thickness.

Maintenance needed:

The main maintenance needed is to plant, pluck the weeds and water the plants as you occasionally add compost manure.

Resources needed in use:

Vertical garden, top soil, compost manure, seedlings and source of water. With those in place you are set and ready to kick off the process of getting your harvest in a few months.

Problems and limits:

Financial constrains faced by the locals in terms of accessing the vertical gardens and seedlings and sometimes source of water can be a limiting factor.

Where and how can you get it or make it?

Available in Nairobi, at Biogas International Limited Company head office in Karen, Ngong Road, Mwitupia plot 33. In Kisumu the branch office is at Dunga Beach.

Skills needed to produce, install, maintenance, use:

The skills needed are just averagely farming techniques with some organic farming skills and how to make a compost manure.

How to use it:**How to maintain it:****Climate effect (if any):**

This kind of farming is climate smart agriculture technique whereby it conserves water by consuming less water, helps to improve the green matter cover, and does not necessarily require clearing of forests and vegetation to set up, hence helps in Environmental conservation and combating climate change.

Where it is used and how many users are there?

It is practiced at Dunga Beach in Kisumu County, managed by Biogas International Limited. Also practiced across the country i.e., by the United Destiny Shapers a CBO in Nyalenda Kisumu, some families in Kajulu Kadero in Kisumu County and in Nairobi, Karen, Biogas International Limited head office.

Why is it successful?

It is successful because its a source of food for many families, and those who have known the benefits plus who wants to secure food security for their families always embraces it and never wants to stop doing it with its benefits attached to their minds. it is also easier to make, install and manage, less labour intensive and time consuming makes it possible to be replicated by many.

If you can make it, a short description, typical problems, materials needed:

The materials needed are vertical gardens, soil, compost manure, seedlings, source of water and tools like Wheelbarrow and spade for installation process. After setting up the garden, the user can just install them, plant in them and maintain them easily.

How to make it (if possible):

Vertical gardening by Biogas International Limited Company.

How is it delivered and by whom?

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Successful financial model**What policies and strategies helped the success?**

The main strategy that continues to result to its success is the strict practice of organic farming.

More info:

This kind of farming is aimed at involving all people of different genders, ages, class and categories to

practice organic farming/agriculture towards attainment of food security. It also aims at extra cash earning by either saving or sales of the vegetables and produce. Also aimed at involving the urban population into agriculture.

Sources:

The source is from Biogas International Limited Company, flexibiogas technology.

<https://biogas.co.ke/2019/05/03/growing-vertical-gardens/>

When was the case uploaded?

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*Case from Catalogue of Local Sustainable Solutions
in East Africa. Read more and see partners at
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