

Online Catalogue:

LOCAL SUSTAINABLE SOLUTIONS IN EAST AFRICA – Growing Food, Oils

www.localsolutions.inforse.org

Collection of Successful Cases of Sustainable Energy and Climate Solutions in Kenya, Uganda, and Tanzania.

Table of Contents

GROWING FOOD, OILS 4
Kitchen gardening 4
Bag Gardening 4
Keyhole Home Gardening 6
Kitchen Garden 8
Vertical Gardening by Biogas International Limited Company 10
Organic vegetables for market 12
Mlango Farm 12
Vertical Gardening by Biogas International Limited Company 14
Agro-foresty, & products from trees 16
Ficus Natalensis Agroforestry systems 16
Soap and Lotion Making from Natural Tree Oils 18

The Catalogue is published by Partners of the Project "East African Civil Society for Sustainable Energy & Climate Action" (EASE-CA), a Project by members of the civil society network INFORSE - International Network for Sustainable Energy. The Partners are: JEEP and UCSD in Uganda, Suswatch in Kenya, TaTEDO in Tanzania, which is also INFORSE-East Africa Coordinator, Nordic Folkecenter for Renewable Energy (NFRE), and INFORSE Secretariat in Denmark. More on the EASE-CA Project: www.inforse.org/africa/EASE.htm. The online database behind the Catalogue is designed by NFRE. The EASE-CA Project is supported by CISU - Civil Society in Development, Denmark in 2019-22.

Catalogue generated on:

03.11.2026

Bag Gardening





Why to choose this solution?

For many urban and slum dwellers, space is limited, while for those living in areas with insufficient rain, the same is true of water. For all these growers, vertical sack gardening is emerging as a way to grow a large supply of vegetables despite water shortages and other constraints. The garden is especially suitable for growing vegetables such as kales, spinach, coriander, onions, tomatoes, okra and eggplant. Normally, when the green leafy vegetables are ready for harvest, they can be harvested 2-3 times a week and deliver strong nutritional value, containing vitamins A, C, and K that are particularly essential for growing children.

Savings per day or production:

This creative innovation is an efficient water-management venture, as the sacks are tailored to ensure that there is no water seepage or waste, thus delivering all added water to the plants. With this option, a space that can be occupied by two kale (sukuma wiki) seedlings planted the conventional way, can be occupied by one sack that can hold up to 150 seedlings, thus increasing food production 75-fold.

Cost in money and in own time to construct:

Small garden costs vary by size, location and complexity. One would spend anywhere from USD 4 to 18 per square foot after installation. Design costs run to USD 0.05 to 0.75 per square foot, or about 5% to 10% of the project cost.

Lifetime:

Grow bags are predicted to last 7 to 8 seasons, but with good care, they can last for much longer. Grow bags fabric is pressed together, not woven, which increases their durability.

Maintenance needed:

Regularly maintaining a garden involves many things including: routine care (pruning, trimming, watering); weeding. Applying either organic or inorganic fertilizers and pesticides.

Resources needed in use:

Tools include: Jembe (shovel) - to dig the soil that will be mixed with other components for constructing the garden; Forkjembe - to dig the soil in hard ground areas; Spade - to be used in collection and mixing the soil components; Tinsnip/ Knife- to cut the top part of the tin completely; Tin punch- to punch holes on the tins surfaces and the bottom; Wheelbarrow - to measure and transport the various soil parts to the recommended ratio, Perforated tins, 50 kgs sacks, gravel, clay soil, sand soil, manure, seeds and water. Purpose of various equipment: Perforated tins- to pass water through to the soil component, hold the gravel in the sack, filter dirty water, bottom tins have few holes and no holes on the bottom, second bottom tin has more holes, and third tin has more holes than the rest.

Problems and limits:

Digging, kneeling, stooping or bending over, and a variety of other repetitive movements that are all part of gardening can be harmful to your joints, to your bones, to your muscles, and can cause blisters on your hands

and possibly also on your feet.

Where and how can you get it or make it?

Smart Farm, Hela mchangani-Kangemi Nairobi.

Skills needed to produce, install. maintenance, use:

Soil analysis, composting (or worm binning), sun- exposure charting, seed germination, planter- building, diligent pest control, pollinating, tool care and maintenance.

How to use it:

https://www.youtube.com/watch?v=DduV2SGhJDU

How to maintain it:

Climate effect (if any):

The technique uses very little water, and one can use recycled water, making it economical. The method has created employment and generated income for both rural and urban dwellers, and has proved to be a good way for farmers to adapt to the effects of climate change.

Why is it successful?

Increased production per unit area (up to six fold). Efficient on time, labour and water. Provision of good agricultural nutrition, It can be accessed by all and low-land requirements (as low as 3 sq meters).

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

Necessary Materials: A woven burlap or plastic bag, such as a used food-aid sack, serves as the container. Fill the bottom of the bag or sack with soil, build up, fill the bag, cut sites for plantings, transplant seedlings, plant on the top, and grow your plants.

How to make it (if possible):

How is it delivered and by whom?

Successful financial model

What policies and strategies helped the success?

The adoption of urban agriculture as a livelihood strategy, as it promotes vertical bag farms that need limited space to set up and to operate.

More info:

The Real IPM Co.(Kenya) Ltd. P.O. Box 4001-01002 Madaraka, Thika, Kenya. Tel +254 725 806086, General enquiries: info@realipm.com. Sales orders: Sales.Ke@biobestgroup.com OR sales@realipm.com

Sources:

Case uploaded:

2021-02-22

Keyhole Home Gardening





Why to choose this solution?

It can improve food security, health, and livelihoods among the communities.

Savings per day or production:

It requires locally available resources to establish. Reduces household expenditures on vegetables, i.e., for a normal family, 2000 USh (USD 1) can be saved per day. Three keyhole gardens can supply a large family with a variety of crops during a year.

Cost in money and in own time to construct:

Requires little land and investment to set up. Family/ home labour is used, and it takes like approximately 3- 5 hours to establish.

Lifetime:

3-5 years.

Maintenance needed:

It is easy to maintain. It only requires regular weeding, fertilizer application, replacing of the compost baskets, planting seeds, and harvesting produce, which is not extremely time-consuming or difficult.

Resources needed in use:

Time, knowledge/competencies, materials (seedlings, garden tools such as hoes, knives)

Problems and limits:

Construction can be somewhat effort-intensive but not cost-intensive.

Where and how can you get it or make it?

JEEP trains communities in how to establish such gardens. The garden can be established in a kitchen space, compound, or courtyard.

Skills needed to produce, install. maintenance, use:

Hands-on skills, vocational skills, home-mentored skills.

How to use it:

To be added.

How to maintain it:

Regular weeding of the garden is needed.

Climate effect (if any):

When using compost in the garden, it helps to increase carbon in soil, which reduces emissions on a small scale. Pollution from use of inorganic fertilizers is limited.

Why is it successful?

It is made through the use of locally available materials, it requires less knowledge and skill, just a small piece of land is needed, and it is easy to make. Usually built near houses, keyhole gardens enable anyone to farm easily, which is especially suitable for elderly and for physically challenged farmers. There is no need for tillage and less need for water. All forces are oriented towards achieving food security in a sustainable manner. Beneficial to the home in waste management, especially compostable kitchen waste.

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

Materials: Stakes, black soil, banana fibres, kitchen waste, garden waste, manure (compost, farm yard manure, poultry litter), bricks/plastic bottles, dry mater, water, seedlings, basin, hoe, spade, etc. Problems: Knowledge and skills, materials in some communities may not be available. Procedures: Establishment needs a trained or skilled person.

How to make it (if possible):

Needs a trained person to make.

How is it delivered and by whom?

JEEP trains trainers of trainers which have been key in delivering the concept to other people in the communities.

Successful financial model

What policies and strategies helped the success?

Government programs, private-sector programs, use of trainers of trainer (ToT) approach, inclusion of vulnerable groups of people in the food-production process, and awareness-creation on the need for a sustainable food-production approach.

More info:

JEEP, 7 Miles, Gayaza Rd, Kyanja, Kampala, P. O. Box 4264, Uganda. Tel: +256 414 578 316. info@jeepfolkecenter.org

Sources:

www.jeepfolkecenter.org

Case uploaded:

2020-09-16

Kitchen Garden





Why to choose this solution?

Kitchen gardens aim to improve food security, health, and livelihoods among local communities.

Savings per day or production:

They reduce household expenditures on vegetables. An average family can save 2,000 Uganda shillings (USD 0.5) per day. Three keyhole gardens can supply a large family of 10 members with a variety of crops during a year.

Cost in money and in own time to construct:

Requires little land and investment to set up. An investment of 5000 USh (USD 1.4) is needed to establish the garden. Family/home labour is required, and it takes approximately 3-5 hours to establish.

Lifetime:

3-5 years.

Maintenance needed:

It is easy to maintain. It only requires regular weeding, fertilizer application, replacing of the compost baskets, planting seeds, and harvesting crops, which is not extremely time-consuming or difficult.

Resources needed in use:

Time, knowledge/competencies, and materials (seedlings, garden tools such as hoes, knives).

Problems and limits:

Construction can be somewhat effort intensive but not cost intensive. Setting up the garden involves many measurements and carrying of a lot of soil to make a heap (40 wheelbarrows of soil are needed to make a heap). If measurements are not accurate, the whole shape may be lost.

Where and how can you get it or make it?

JEEP trains communities in how to establish such gardens. The garden can be established in kitchen space, compound, or courtyard. It is available in Uganda mainly in the central and northern parts of the country.

Skills needed to produce, install. maintenance, use:

Hands-on skills, vocational skills, home-mentored skills. Knowledge of basic gardening: when to plant, use compost, weed and harvest; what kind of seeds to use.

How to use it:

Not relevant.

How to maintain it:

Regular weeding of the garden.

Climate effect (if any):

In the keyhole garden, farmers grow a variety of plants of which some have insect-repellent properties thus decreasing pest occurrence and also eliminating the costs of pesticides and their negative effects on the environment.

Why is it successful?

It is made through the use of locally available materials. It requires some knowledge and skills and a small piece of land. It is easy to make. Usually, they are made near houses. Keyhole gardens enable anyone to farm easily, which is especially suitable for elderly and for physically challenged farmers. There is no need for tillage and less need for water. All forces are oriented towards achieving food security in a sustainable manner.

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

Materials such as stakes, black soil, banana fibres, compostable kitchen waste, garden waste, manure (compost, farmyard manure, poultry litter), bricks/ plastic bottles, dry mater, water, seedlings, basin, hoe, spade. Knowledge and skills are needed to establish. Materials may not be available in some communities.

How to make it (if possible):

Needs a skilled person to make.

How is it delivered and by whom?

Keyhole gardening is a home-based income generation activity. Delivery model is practical hands-on and participatory in nature. Business model is establishment by skilled / trained persons. The solution can be implemented individually, as a group or family who can sell the grown food stuffs to traders and directly to consumers. Trained trainers of trainers (TOTs), CSOs have got a key coordinating function in implementing the solution towards ensuring food security and improved livelihoods.

Successful financial model

Kitchen gardens are often promoted as a way to cut household costs by providing low-cost access to fruits and vegetables. Kitchen gardens are profitable, if the fair market value of garden labor is excluded from calculated costs. Local environmental conditions, gardening practices, and crop choices will influence the actual net value realized by individual gardeners.

What policies and strategies helped the success?

Government programs, private-sector programs, use of trainers of trainers (ToT) approach; support from development partners in the promotion of urban agriculture; and awareness-creation on the need for a sustainable food-production approach.

More info:

JEEP, 7 Miles, Gayaza Rd, Kyanja, Kampala, P. O. Box 4264, Uganda. Tel: +256 414 578 316.

Sources:

Email: info@jeepfolkecenter.org/ https://jeepfolkecenter.org/

Case uploaded:

2020-10-15

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, Mwitu 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.

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?

Vertical gardening by Biogas International Limited Company

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/

Case uploaded:

2023-03-15

Mlango Farm





Why to choose this solution?

Mlango Farm is an agricultural sanctuary where quality and sustainable foods are grown without the use of artificial fertilizers and synthetic pesticides. It produces over 50 different crops (fruits and vegetables). This organic farming helps to eliminate pesticides and chemicals sprayed on plants contaminating the soil, water supply, and air; it reduces pollution of air, soil, food, and groundwater. It also helps reduce public health risks because the produce is rich in nutrients such as vitamin C, iron, magnesium, and phosphorus, with less exposure to nitrates and pesticide residues.

Savings per day or production:

Not specified.

Cost in money and in own time to construct:

Not specified.

Lifetime:

Mlango Farm has been operational since the year 2007.

Maintenance needed:

Weeding, watering the crops, picking of fresh produce.

Resources needed in use:

They use a farmland, compost, crop residue, labour.

Problems and limits:

Mlango Farm sits on a slope, thus incurring additional cost for construction of terraces and contours.

Where and how can you get it or make it?

Mlango Farm is situated in Ngecha village in Limuru Kenya.

Skills needed to produce, install. maintenance, use:

Agricultural (fundamentals of farming) skills are required to produce and maintain the crops.

How to use it:

To be added.

How to maintain it:

To be added.

Climate effect (if any):

Not specified.

Why is it successful?

Mlango Farm attribute their success to understanding the fundamentals of farming, which, according to them,

starts with healthy soil. They use compost, crop residue, and crop rotation to enrich the soil. The success of soil care at the farm is evident through the quality of their produce. Many of their customers can attest to the tastiness of their produce.

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

Requires farm land, fruit trees, vegetables, and compost.

How to make it (if possible):

Not relevant.

How is it delivered and by whom?

Mlango Farm delivers fresh vegetables to hotels and restaurants in Nairobi and its environs, including farm-share baskets with a variety of vegetables to individuals. Every week they deliver baskets with a variety of vegetables at pickup points, they bring the vegetables to a pickup point in the morning, from which customers can pick up their basket during that day or at whichever time is convenient to them. Customers can sign up for only 950 Ksh per week on http://www.mlango.org/img/signup.pdf and send an email to: baskets@mlango.org. One basket is enough for 4 or 5 meals.

Successful financial model

Collaboration with agricultural experts, Learning from online resources ie Google since the Kamande Njenga and his wife Els Breet both did not have a background in agriculture when they started the farm. Mlango farm foundation aiming to provide children and youth (regardless of socio-economic background) encouraging practical and experimental learning through farm visits for all ages.

What policies and strategies helped the success?

Certification by Encert in 2010. Farm tours at a cost of 1,500 KSh (USD 15) per person (half price for children, and kids under the age of 3 are free).

More info:

http://www.mlango.org/

Sources:

Mlango farm, Limuru Rd, Nairobi. Tel: 0728 848296. E-mail: info@mlango.org

Case uploaded:

2020-09-22

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, Mwitu 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.

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?

Vertical gardening by Biogas International Limited Company

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/

Case uploaded:

2023-03-15

Ficus Natalensis Agroforestry systems







Why to choose this solution?

Tree is grown as a live fence around homes and at a wide spacing for shade and soil rejunevation in coffee, cocoa and banana plantations, as it drops leaves which quickly decay to provide both soil cover and manure. Throughout Uganda, barkcloth is made from this tree which can be used domestically or sold to supplement household income. Leaves are used to treat dysentry and sore throats. Other uses: Pruned branches are used as fuel wood when dry and as fodder for livestock, and also act as windbreaks.

Savings per day or production:

Any annual or perennial crop can be inter-cropped with Ficus spp. provided the tree canopy is managed well.

Cost in money and in own time to construct:

The most important factor affecting cost is labor to transport the bulky stem cuttings to the site. However, Ficus natalensis is easy to establish and is durable (over 100 years) depending on management.

Lifetime:

Ficus Natalensis is propagated using cuttings from young branches which are planted vertically 6m apart along a contour. The tree is quite robust and can attain heights of over 20m, with a very extensive canopy if left to grow unchecked.

Maintenance needed:

Pruning raises its canopy to the desired height above the ground. Fencing is required to protect the tree from damage by livestock in early stages. Within 12 to 18 months, the tree is established enough to withstand browsing (WOCAT, 2014). Implementation of the technology on steep slopes(> 50%) not possible without other supportive Sustainable Land Management interventions including construction of stone lines and mulch application.

Resources needed in use:

A Ficus tree can live for a hundred years.

Problems and limits:

Scarcity of fuel wood may lead to over-harvesting of branches, destroying the canopy. Nonetheless, the tree regenerates quickly with the coming of the rains.

Where and how can you get it or make it?

Ficus Natalensis is propagated using cuttings from young branches which are planted vertically 6m apart. Propagation material (large cuttings and seedlings) is readily available and cheap, making the technology inexpensive to establish. It is cultivated in all regions of Uganda.

Skills needed to produce, install. maintenance, use:

Simple farming knowledge and skills. A wide strip of bark is removed in one piece, then softened with steam. An 18-inch-wide strip of bark can be beaten with a mallet into pieces of cloth over seven feet wide. One tree

could yield 40 bark strippings (AB Katende et. al., 1995).

How to use it:

Barkcloth Making in Uganda: https://www.youtube.com/watch?v=uhznFtHhkBo

How to maintain it:

Maintenance is by simple agronomic practices like weeding when still young. Care should be taken no to harm the skin if the aim is to get good quality bark-cloth. When the canopy grows so thick and heavy it may be good to reduce because a very heavy canopy can result to getting the tree uprooted during storms.

Climate effect (if any):

Why is it successful?

Propagation material is readily available and cheap, making the technology inexpensive to establish.

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

How to make it (if possible):

How is it delivered and by whom?

Successful financial model

What policies and strategies helped the success?

The National Forestry and Tree Planting Act (2003) that recognizes indigenous knowledge in forest conservation, in line with the Convention on Biodiversity.

More info:

AB Katende et. al, (1995). Useful Trees and Shrubs for Uganda. Regional Soil Conservation Unit. WOCAT (2014). Ficus Natalensis Agroforestry System.

Sources:

http://www.fao.org/3/au287e/au287e.pdf

Case uploaded:

2021-03-16

Soap and Lotion Making from Natural Tree Oils







Why to choose this solution?

Trees such as shear nut tree, Eucalyptus tree, coconut tree and palm trees provide natural oils, which can be used for making soaps (laundry, bathing and liquid soap), Vaseline cream, lotions, and body creams. Using these natural oils have also health benefits to treating skin disorders, certain diseases, and repelling mosquitos. Soap making plays a big role in environment conservation because efforts are now being made to conserve these trees, from which the oil can extracted and be used to generate income. It can also be a good activity for small case business of a Village Savings and Loans Associations (VSLA). Good for both children and adults.

Savings per day or production:

Using soap reduces household expenditures on soap because for an average family a bar can be used for three weeks compared to other ordinary soap which lasts for about two weeks.

Cost in money and in own time to construct:

It requires little investment to start. One may need approximately USD 57 (USh 200,000) as start-up capital to start making soap for a small business. The soap making process takes 45 minutes, after which the soaps need three weeks to get dried. Then you can package and label them. The different products from natural oils costs between USh 2,000 - 50,000 (USD 0.54-14).

Lifetime:

The soap can last for over 3 years since it is made out of natural tree oils and no preservatives are added.

Maintenance needed:

Needs be stored in a cool dry place.

Resources needed in use:

Buckets / basins and water.

Problems and limits:

Inhalation of caustic soda fumes during the soap making process can be dangerous to human health. Therefore, it is necessary to use masks or scarf and gloves during the soap making.

Where and how can you get it or make it?

In Uganda, JEEP is making soap and JEEP also trains communities in soap production.

Skills needed to produce, install. maintenance, use:

The ingredients are shea butter, coconut oils, caustic soda, water, and herbs like Aloe Vera, rosemary, pawpaw leaves. Equipment needed are measuring weight, bowls and a spoon to mix and heat, and molding trays. About 5 liter plant oil makes 45 soap bar weighing 120 grammes.

How to use it:

How to maintain it:

Climate effect (if any):

It is environment friendly and it is playing a big part in environment conservation because efforts are now being made to conserve the trees where the oils come from.

Why is it successful?

It is successful because it requires small investment to start and materials are locally available from indigenous trees in Uganda. Additionally, soap is on a high demand everywhere in the world. It is also a good activity for a small scale business, and as a Village Savings and Loans Association activity.

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

How to make it (if possible):

https://www.youtube.com/watch?v=zRSxDWfIkhA&ab_channel=JointEnergyandEnvironmentProjects

How is it delivered and by whom?

Business model is production by skilled persons with a few employees that sell to traders, shops, markets and directly to. Trained small organised groups can help to maintain quality. JEEP has supported and coordinated organising and training such groups in rural and urban centres.

Successful financial model

Support for development, training of small organised groups in soap making and branding with labelling.

What policies and strategies helped the success?

Government efforts to conserve the trees from which natural oils come from. Subsidising prices so as it is affordable to many people. Advertising it by emphasizing that it is made from natural tree oils, educating people about the health benefits and encouraging people to take it on as a VSLA activity.

More info:

https://www.youtube.com/channel/UCNu_MEIXjnCWqDXjuCD6yQg and
https://www.youtube.com/watch?v=oufmoZuMqVU

Sources:

JEEP, 7 Miles, Gayaza Rd, Kyanja, Kampala, P. O. Box 4264, Uganda. Phone: +256 (414) 578 316. E-mail: info@jeepfolkecenter.org, Web: https://jeepfolkecenter.org/

Case uploaded:

2020-10-06