



# Uganda Investment Authority

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# Business Ideas

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## BUSINESS IDEA FOR MANUFACTURING SCENTED PHENYL

### Introduction

This business idea is for manufacturing and marketing of Scented phenyl. Scented phenyl is used as a disinfectant to clean wash basins, toilets, and kitchen sinks etc. It is used in residential houses and commercial establishments such as: hospitals, offices and shops etc., as a disinfectant and also for some pleasant smell. It is used in most households and other institution like hotels and thus has a good market potential. The business idea is premised on production of 2,600 liters of scented phenyl per month which translates into 31,200 liters per annum. The revenue potential is estimated at US\$5,200 per month translating into US\$62,400 per annum with a sales margin of 20% and total investment requirement is US\$42,850 for the first year of project operation

### Production Capacity

The production capacity depends on the quantity of raw materials and technology used in the production process. But for this case, the plant has a minimum capacity of 31,200 liters of scented phenyl per annum and this is on the basis of 312 working days in a year and 8-hour single work shifts in the working days.

### Production Process

The raw materials are weighed and put separately. After preparing the caustic soda solution, required quantities of resin, castor oil, light creosote oil and caustic soda solution, are mixed together in a reactor. After obtaining the final product from the storage tanks, the final product can be packed into bottles and ready for market.

### Scale of Investment, Capital Investment Requirement and Equipment in US\$

The Scale of investment depends on the target goals of an investor.

### Market Analysis

Market for scented phenyl is growing due to good fragrance and also because of almost the same cost as that of ordinary phenyl. The wide application in commercial establishments, hospitals, hotels, nursing homes and restaurants, etc., has carved a good market niche for this product. In Uganda, this industry is not yet developed.

### Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Reaction vessel	No	1	500	500
Medium sealing machine	No	1	250	250
Bottle filling machine	No	1	500	500
Storage vessels	No	3	250	750
Weighing scale.	No	1	250	250
<b>Total</b>				<b>2,250</b>

### Production and Operating Costs in US\$

#### Direct Materials, Supplies and Costs

Cost Item	Units	Unit cost	Qty/day	Pdn cost/day	Pdn cost/month	Pdn cost/year
<b>Direct Costs</b>						
Rosin	liter	0.75	30	22.5	585	7,020
Caster oil	liter	0.5	15	7.5	195	2,340

Caustic soda	liter	0.5	15	7.5	195	2,340
Light creosote oil	liter	0.5	50	25	650	7,800
<b>Sub-total</b>			<b>110</b>	<b>62.5</b>	<b>1,625</b>	<b>19,500</b>
<b>General Costs (Overheads)</b>						
Rent					250	3,000
Labour					500	6,000
Utilities					100	1,200
Transport					100	100
Preliminary Costs					100	1,200
Miscellaneous Costs					50	600
Depreciation					750	9,000
<b>Sub-total</b>					<b>1,850</b>	<b>21,100</b>
<b>Total Operating Costs</b>					<b>3,475</b>	<b>40,600</b>

1. Production costs assumed 312 days per year with a daily capacity of 100 liters of Scented Phenyl
2. Depreciation (fixed asset write off) assumes \_4\_ years life of assets written off at \_25%\_ per year for all assets.
3. Direct Costs include: materials, supplies and other costs that directly go into production of the product.
4. A production month is assumed to have 26 days.

### Project Product Costs and Price Structure in US\$

Item	Qty/day	Qty/Yr	Unit cost	Pdn cost/Yr	Unit price	T/rev
Scented Phenyl	100	31,200	1.3	40,600	2	62,400

### Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Yr
Revenue	200	5,200	62,400
Less: Production and Operating Costs	130	3,383	40,600
<b>Profit</b>	<b>70</b>	<b>1,817</b>	<b>21,800</b>

### Source of Supply of Rawmaterials and Equipments

Raw materials and machines can be imported from India

### Government Incentives

There are low tax rates and no taxes on most of the industrial equipments and raw materials. Tax policies also favor industrialists for example VAT deferment.

## BUSINESS IDEA FOR MAKING WOODEN PACKING CASES



### Introduction

Demand for packing cases is on the increase due to speedy industrial development. There is scope for the manufacture of packing cases made from seasoned and treated wood. Wooden crates are widely used at shipping yards, railway yards and airport packaging and thus have a good market.

### Production Process

The wooden planks are cut into required sizes and the reapers are fixed. Subsequently, they are cut into required sizes and are bundled and supplied to units. This unit can also undertake manufacturing of wooden furniture.

### Market Analysis

There is an ever-increasing demand for packing cases in the country, especially in the transport and service sectors. Hence, this project provides profitable market avenues.

### Capital Investment Requirements in US\$

Capital investment item	Units	Qty	Unit cost	Amount
Universal thickness planner	No.	1	1,250	1,250
Bench type drilling machine	No.	1	100	100
Portable drilling machine	No.	1	75	75
Bench grinder	No.	1	200	200
Others	No.	1	500	500
Total cost on machinery				<b>2,125</b>

### Production and Operating Costs

Cost Item	Units	Unit cost /day	Qty/ day	Pdn cost/ day	Pdncost/ month	Pdn cost/yr
Nails	Kg	1.1	20	22	572	6,864
Glue	Ltrs	6	10	60	1,560	18,720
Steel strips	bundle s	1.5	20	30	780	9,360
Timber	Pieces	3.5	200	700	18,200	218,400
<b>Sub-totals</b>				<b>812</b>	<b>21,112</b>	<b>253,344</b>
<b>General costs (overheads)</b>						
Utilities (water and power)					175	2100
Labour					781	9375
Rent					200	2400
Miscellaneous costs					250	3,000
Distribution costs					260	3,120
<b>Depreciation (Asset write off) Expenses</b>					44	531
<b>Sub -total</b>					<b>1,711</b>	<b>20526</b>
<b>Total Operating Costs</b>					<b>22,823</b>	<b>273,870</b>

1 Production costs assumed 312 days per year with a daily capacity of 70 wooden packing cases.

2 Depreciation (fixed assets write off) assumes 4 years life of assets written

off at 25% per year for all assets

3 Direct costs include materials, supplies and other costs that directly go into production of the product.

### Project product Costs and Price Structure in (\$)

Item	Qty/d ay	Qty/ yr	Unit Cost	Pdn cost /yr	Unit Price	Total revenue
Wooden packing cases	70	21,840	12.54	273,870	15.0	327600

### Profitability Analysis in US\$

Profitability Item	Per day	Per month	Per Year
Revenue	1,050	27,300	327,600
Less production and operating Costs	878	22,823	273,870
<b>Profit</b>	<b>172</b>	<b>4,477</b>	<b>53,730</b>

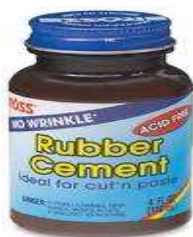
### Source of Supply of Rawmaterials and Equipments

Rawmaterials and equipments are locally available in the local market.

### Government Facilities and Incentives

Government through National Forestry Authority has embarked on Conservation of Forests and planting of various species of trees.

## BUSINESS IDEA FOR MAKING RUBBER CEMENT



### Introduction

This profile envisages the establishment of a plant that will make Rubber Cement. **Rubber cement** is an **adhesive** made from elastic **polymers** (typically latex) mixed in a **solvent** such as **acetone**, **hexane**, **heptane** or **benzene** to keep them fluid enough to be used. This makes it part of the class of **drying adhesives**: as the solvents quickly evaporate, the "rubber" portion remains

behind, forming a strong yet flexible bond. Often a small percentage of alcohol is added to the mix.

### Production Process

The process to make rubber cement is relatively simple. After the rubber is broken down into smaller pieces, it is mixed with the hexane-or heptane-based solvent and then various sizes of containers are filled with the liquid. Most equipment is automated.

### Raw Materials

Rubber cement is an opaque liquid that contains pulverized natural or synthetic rubber and a solvent based on hexane or heptanes. Grades of rubber cement may contain 70-90% heptanes or hexane and 1-15% isopropyl alcohol (isopropanol) or ethyl alcohol (ethanol). The rubber is received in the form of large blocks or slabs, typically 100 lb (45 kg) in size.

### Scale of Investment, Capital Investment Requirements

The total Capital Investment cost to start this project is estimated at **USD70**.

### Market Analysis

The demand for Rubber cement is favored in art applications where easy and damage-free removal of adhesive is desired. For example, rubber cement is used as the marking fluid in **erasable pens**. The rubber cement can be removed via the eraser up to 10 hours after application. However, there are no established firms in this industry in Uganda.

### Project Costs

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Truck	No.	1	8,000	8,000
Grinder	No.	1	2,500	2,500
Mixer	No.	1	500	500
Tanks	No.	5	100	500
Furniture	No.	2	30	60
Weighing Scale	No.	1	100	100
Packaging Machine	No.	1	1,000	1,000
<b>Total Amount</b>				<b>12,660</b>

#### 2. Operating Costs in US\$

Item	Units	Unit Cost \$	Qty/ day	Prod. Cost/d ay\$	Prod. Cost/mon th\$	Prod. Cost/Year [1]\$
<b>Direct Costs</b>						
Rubber	Kgs	0.75	500	375	9,750	117,000
Heptanes	Ltrs	50	25	1250	32,500	390,000
Ethanol	Ltrs	0.44	75	33	858	10,296
<b>Sub total</b>				<b>1,658</b>	<b>43,108</b>	<b>517,296</b>

General Costs (Over heads)		
Rent	500	6,000
Labour	500	6,000
Utilities (Power & Water)	800	9,600
Repair & Maintenance	300	3,600
Packaging Materials	200	2,400
Fuel	500	6,000
Depreciation(Asset write off) Expenses	263.8	3,165
<b>Sub - total</b>	<b>3,064</b>	<b>36,765</b>
<b>Total Operating Costs</b>	<b>46,172</b>	<b>554,061</b>

### 3. Project Product Costs & Price Structure

Item	Qty/ dayL trs	Qty/yr	Unit Cost \$	Pdn Cost/yr\$	Unit price	T/rev
Rubber Cement	600	187,200	2.95	554,061	3.5	655,200

### 4. Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	2,100	54,600	655,200
Less: Production & Operating Costs	1,658	46,172	554,061
Profit	442	8,428	101,139

### Sources of Supply of Equipment and Rawmaterials

Raw materials may be imported from Liberia/West African Countries.

### Government Incentives

The Government is willing to support industrialization through; Tax exemptions, Basic infrastructure, Grants, long term Loans and liberalized market.

## BUSINESS IDEA FOR MAKING FIBRE BRUSHES



### Introduction

This profile envisages the establishment of a plant that will make Fibre Brushes based on the capacity of **1000 brushes** per day.

### Production Process

Fibre Brushes are made by sticking/fastening together Fibres on to a wooden handle.

### Raw materials

- Fibre
- Fasteners / Glue
- Wood for handles

### Tools & Equipments

- Brush Fibre cutting machine
- Pliers

*N.B: These equipments are readily available in Uganda.*

### Scale of Investment, Capital Investment Requirements

The total Capital Investment cost to start this project is estimated at **USD70**.

### Market Analysis

The demand for Fibre brushes is very high in Schools, Offices, Industries and Craft works among others. This sector is still informal as there are very many small scale industries dealing in the products.

### Project Costs

#### Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Fibre cutter	No.	1	50	50
Pliers	No.	2	10	20
<b>Total Amount</b>				<b>70</b>

#### Operating Costs in US\$

Item	Units	Unit Cost \$	Qty/day	Prod. Cost/day\$	Prod. Cost/month\$	Prod. Cost/Year[1]\$
<b>Direct Costs</b>						
Fibre	Bdls	10	20	200	5200	62400
Handles	No.	0.25	1000	250	6500	78000
Glue	Ltrs	2	50	100	2600	31200
<b>Sub total</b>				<b>550</b>	<b>14,300</b>	<b>171,600</b>
<b>General Costs (Over heads)</b>						
Rent					300	3,600
Labour					500	6,000
Utilities (Power & Water)					100	1,200
<b>Sub - total</b>					<b>900</b>	<b>10,800</b>
<b>Total Operating Costs</b>					<b>15,200</b>	<b>182,400</b>

### 5. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost	Pdn Cost/yr	Unit price	T/rev
Brushes	1000	312,000	0.6	182,400	0.75	234,000

### 6. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	750	19,500	234,000
Less: Production & Operating Costs	550	15,200	182,400
<b>Profit</b>	<b>200</b>	<b>4,300</b>	<b>51,600</b>

### Sources of Supply of Rawmaterials and Equipment

Equipments and Raw materials are readily available in Uganda.

### Government Facilities and Incentives Available:

The Government is willing to support industrialization through; Tax exemptions, Basic infrastructure, Grants, long term Loans and liberalized market.

## BUSINESS IDEA FOR JUICE EXTRACTION - APPLES



### Introduction:

This profile envisages the establishment of a plant for the production of apple juice with a capacity of **1,500** ltrs per day. Apple juice is the unfermented juice obtained from sound, ripe apples, with or without parts.

### Production Capacity:

Based on the demand projection indicated in the introduction, capital requirement and minimum economy of scale, the proposed plant will have production capacity of **1,500 ltrs** of apple juice per annum.

### Production Process:

Apple juice production begins with fruit harvesting, transport and washing facilities, then Extraction of juice and packaging. However, all fruit must be sound and free from gross damage or contamination. The fruit should be picked at the proper stage of maturity for the preparation of juice. The flavour, sugar content and pectin levels of the juice will vary with the maturity of the fruit.

### Raw Materials:

According to UNBS Standard, Apple fruits used for Juice extraction shall be sufficiently ripe, fresh, wholesome and sound, free from traces of spoilage, insects, parts of insects and foreign matters. However, other ingredients may be added such as Flavours and Sugar.

### Equipment:

The Equipment used to press or extract juice from fruit include: Juice Extractor, Juice filters, Filling and Packaging machine, Refrigerator/Cooling Machine, Labeler and Boiler.

### Scale of Investment, Capital Investment Requirements

The Scale of investment for this project capital is estimated at USD19,265.

### Market Analysis

Apple juice may be sold in Super markets, Schools, Hospitals, Hotels, Retail shops and Exported. The best example of the key players are; Mukwano Group and Britania Allied Industries.

### Project Costs:

#### 1. Capital Requirements:

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Delivery Van	No.	1	8,000	8,000
Juice Extractor	No.	1	3,000	3,000
Jar Lifter	No.	1	1,000	1,000
Timer	No.	1	25	25
Juice Tanks	No.	3	50	150
Boiler	No.	1	1,000	1,000
Furniture	No.	3	30	90
Labeler	No.	1	2,000	2,000

Packaging Machine	No.	1	4,000	4,000
<b>Total Amount</b>				<b>19,265</b>

### 2. Operating Costs

Item	Units	Unit Cost	Qty/day	Prod. Cost/day\$	Prod. Cost/month\$	Prod. Cost/Year[1]\$
<b>Direct Costs</b>						
Apples	Kgs	1.5	1000	1500	39000	468000
Flavours	Kgs	1	100	100	2600	31200
Food Colours	Kgs	0.5	100	50	1300	15600
Preservatives	Kgs	5	100	500	13000	156000
Sugar	Kgs	2.1	200	420	10920	131040
Water	Litres	0.05	500	25	650	7800
<b>Sub total</b>				<b>2,595</b>	<b>67,470</b>	<b>809,640</b>
<b>General Costs (Over heads)</b>						
Rent					500	6,000
Packaging Material					500	6,000
Labour					800	9,600
Utilities (Power)					800	9,600
Repair & Servicing					500	6,000
Fuel					500	6,000
Depreciation(Asset write off) Expenses					401.3	4,816
<b>Sub - total</b>					<b>4,001.3</b>	<b>48,016</b>
<b>Total Operating Costs</b>					<b>71,471.3</b>	<b>857,656</b>

### 3. Project Product Costs & Price Structure

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
Apple Juice	1500	468,000	1.94	910,635	2.5	1,170,000

### 4. Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	3,750	97,500	1,170,000
Less: Production & Operating Costs	2,595	71,471.3	857,656
<b>Profit</b>	<b>1,155</b>	<b>26,028.7</b>	<b>312,344</b>

### Sources of Supply of Equipment and Rawmaterials

The major Rawmaterial, apple fruit can be grown in the region, in areas like Kanungu & Kabaale or sourced from neighboring regions like Kenya. Equipments can be imported from China and India

### Government Incentives

The Government is willing to support Agro – processing industries by providing Capital/Input, Tax exemptions, Land, Basic infrastructure, Grants and long term Loans at relatively low interest rates and a liberalized market.

## BUSINESS IDEA FOR MAKING LIQUID DETERGENTS



### Introduction

This profile envisages the establishment of a plant for the production of Liquid Detergent based on the capacity of **500Ltrs** per day. A detergent is a kind of soap used for cleaning utensils. Detergent soaps are effective for cleaning utensils made of metal such as spoons, forks and pans. Detergents can be in powder form (powdered detergent). When dissolved, powdered detergents become liquid detergents.

### Production Process

#### Procedure:

- Using a graduated cylinder, measure 80-130g SLES. Measure also 772-830g water.
- Transfer the SLES to a beaker and add a little water. Stir the SLES very well.
- Add 50g CDEA to the SLES. Mix well with a stirrer.
- Continue stirring the mixture until it becomes creamy. Add water once in a while to prevent the mixture from foaming while stirring.
- Meanwhile, dissolve 30g of STPP in a little amount of water. Mix well and set aside.
- If the CDEA-SLES mixture is already creamy, transfer it to a small pail or a stainless steel container. Add a little amount of water while stirring continuously.
- Transfer the mixture to the mixer then switch on. When the mixture is already foamy, add the dissolved STPP slowly while mixing continuously.
- Dissolve the salt in a little amount of water. Add this mixture, which is being mixed continuously.
- Next, add 5-8ml lemon drops as fragrance.
- Continue mixing until the mixture thickens. Set aside.
- Once thickened, pour the mixture into a clean container and set aside for about 2 hours.
- When there are no more suds, pour the liquid detergent into clean bottles.
- The liquid detergent can be used after 24 hours.

### Raw Materials/Ingredients

- SLES (Sodium Lauryl Sulfate)
- CDEA (Coconut Diethanolamide) - Foam stabilizer
- STPP
- Table salt or sodium chloride
- Lemon fragrance
- Water

### Equipment & Materials

- beaker
- graduated cylinder
- stainless steel container and electric mixer
- stirrer
- mixing bowl or small pail
- Packaging Machine
- Weighing scale

### Scale of Investment, Capital Investment Requirements

The total Capital investment cost to start this project is estimated at

USD 500.

### Market Analysis

The market for Liquid detergent is spread all over the country especially in Super markets, Schools, Hospitals, Hotels & Hostels, Retail shops, and Exported. The major key player in this sector is Mukwano Group of Industries.

### Project Costs

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Delivery Van	No.	1	7,000	7,000
Mixer	No.	1	1,000	1,000
Beaker	No.	1	500	500
Cylinder	No.	1	500	500
Stirrer	No.	1	50	50
Bowls	No.	4	25	100
Weighing Scale	No.	1	100	100
Furniture	No.	3	30	90
Packaging Machine	No.	1	2,000	2,000
<b>Total Amount</b>				<b>11,340</b>

#### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
SLES	Kgs	6	10	60	1560	18720
CDEA	Kgs	8	10	80	2080	24960
STPP	Kgs	4	10	40	1040	12480
Sodium	Kgs	1	5	5	130	1560
Fragrance	Ltrs	5	50	250	6500	78000
Water	Ltrs	0.05	500	25	650	7800
<b>Sub total</b>				<b>460</b>	<b>11,960</b>	<b>143,520</b>
<b>General Costs (Over heads)</b>						
Rent					400	4,800
Packaging Material					500	6,000
Labour					800	9,600
Utilities (Power)					500	6,000
Repair & Servicing					500	6,000
Fuel					500	6,000
Depreciation(Asset write off) Expenses					236.25	28,35
<b>Sub - total</b>					<b>3,436.25</b>	<b>72,420</b>
<b>Total Operating Costs</b>					<b>15,396.25</b>	<b>215,940</b>

#### 3. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost	Pdn Cost/yr	Unit price	T/rev
Detergent	500	156,000	1.4	215,940	2	312,000

#### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	1,000	26,000	312,000
Less: Production & Operating Costs	460	15,396.25	215,940
<b>Profit</b>	<b>540</b>	<b>8,005</b>	<b>96,060</b>

### Sources of Supply of Equipment and Raw materials

Equipments and Rawmaterials are readily available in Uganda, i.e. purchased from Chemical shops.

### Government Incentives

The Government is willing to support industrialization in Uganda through; Capital/Input, Tax exemptions, Land, Basic infrastructure, Grants, long term Loans and liberalized market.



## BUSINESS IDEA FOR BUTTER MAKING



### Introduction

This profile envisages the establishment of a plant that produces Butter. Butter is a spread made from solidified cream. Cream is taken from milk and then churned. Eventually Butter globules form, and start to clump together. Two products result at the end: Butter, and the liquid left over, which is called Butter milk.

### Production Capacity

This plant will be capable of producing **200 kgs** of Butter every day which will tantamount to **6,000 kgs** per month.

### Production Process & Technology

Butter is made through the process of churning milk cream. The churning process breaks down a membrane around the Butterfat molecules, allowing them to adhere to each other, thus coagulating to form Butter. Butter forms in the final two minutes of the churning process. Salt used to be added to Butter as a preservative, slowing down the growth of bacteria in the Butter; today, it is added mostly as flavouring for those who are used to or prefer the taste of salted Butter.

### Raw Materials

The major raw materials used to make Butter includes: Milk cream, and salt.

### Equipment

The major Equipment needed in the making of yoghurt includes:

- Cream separators
- Churning / Butter machine
- Butter cutter
- Refrigerators
- Milk Tanks

### Scale of Investment, Capital Investment Requirements

The total fixed capital investment cost of the project is estimated at **USD 18,340**.

### Market Analysis

The demand for Butter is very high in urban centres where there are super markets, five star hotels and a high income class of people as well as on the world market. The main key players in this sector include; Sameer Agric & Livestock Industry, Fresh Dairy, among others.

### Project Costs

The Initial Capital Investment requirements are estimated at US\$ **58,290**.

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Delivery Van	No.	1	8,000	8,000
Milk Truck	No.	1	15,000	15,000
Cream Separator	No.	1	1,500	1,500
Butter Cutter	No.	1	2,000	2,000

## BUSINESS IDEAS

Churning Machine	No.	1	3,000	3,000
Refrigerators	No.	2	500	1,000
Milk Tanks	No.	2	250	500
<b>Total Amount</b>				<b>31,000</b>

### 2. Operating Costs in US \$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Milk	Ltrs	0.3	5,000	1,500	39,000	468,000
Salt	Kgs	0.8	20	20	520	6,240
<b>Sub total</b>				1,520	39,520	474,240
<b>General Costs (Over heads)</b>						
Rent					600	7,200
Packaging					200	2,400
Labour					1,000	12,000
Utilities (Power & Water)					1,000	12,000
Repair & Maintenance					500	6,000
Fuel					1,500	18,000
Depreciation (Asset write off) Expenses					645.3	7,750
<b>Sub - total</b>					<b>5,445.3</b>	<b>65,350</b>
<b>Total Operating Costs</b>					<b>44,965.3</b>	<b>539,590</b>

### 3. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost	Pdn Cost/yr	Unit price	T/rev
Butter	500	156,000	3.45	539,590	5	780,000

### 4. Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	2,500	65,000	780,000
Less: Production & Operating Costs	1,520	44,966	539,590
<b>Profit</b>	<b>980</b>	<b>20,034</b>	<b>240,410</b>

### Sources of Supply of Equipment and Rawmaterials

Milk which is the prime Raw material for Butter making will be supplied locally from milk collecting centres especially in western and central parts of Uganda. Equipments can be imported from China and India

### Government Incentives

The Government has tried to improve on the Transport and Communication Network, removed tax levy on agricultural products in a bid to promote Agro-processing industry in Uganda.

## BUSINESS IDEA FOR MAKING HERBAL BATH SOAP



### Introduction

This profile envisages the setting up of a plant for the production of Herbal bath soap with a

capacity of **200kg** per day. The herbal bath soap is a kind of soap that contains natural ingredients like the essential oils from aloe vera, patchouli, citronella, rose and sampaguita.

### Production Procedure/Process

1. Measure and weigh the ingredients as specified.
2. To make 36Â°Be lye solution, mix well 2 1/2 liters of water with 1 kg of caustic soda.
3. Measure 360 ml lye solution and mix with 590 ml of the oil using an electric mixer. Blend the oil-lye mixture very well until creamy.
4. While mixing continuously, prepare the coloring for the soap. In separate containers, dissolve a few drops of oil with a little of the blue and yellow coloring powder. Use separate sticks for stirring each color.
5. Mix together the dissolved blue and yellow coloring powder in one container. Estimate the amount of each color to produce an olive green color. Set aside.
6. Go back to the oil-lye mixture in the mixer and test its consistency by using a chopstick or bamboo stick.
7. When the oil-lye mixture is already creamy, add the aloe vera essence and spring fragrance. Next, add the remaining additives – CDEA, sodium silicate and sodium benzoate.
8. While mixing continuously, add the prepared olive green color.
9. When the olive green color is already even, remove the mixture from the mixer.
10. Transfer the mixture to the molds. Distribute the soap mixture evenly
11. Allow the soap to harden for 2-4 hours. When the soap hardens, slice it by using a piece of string.

### Equipment & Materials:

Electric mixer, Blender, Pail, Bamboo sticks or chopsticks as stirrer, Soap molds, piece of string for slicing the soap into desired sizes. *(These tools are found in Uganda's fabricating industry)*

### Scale of Investment, Capital Investment Requirements

The total Capital Investment cost to start this project including year one's operating costs is estimated at **USD 367,556**.

### Market Analysis

The demand for herbal soap is widely spread all over the Country although it may also be exported. This sector is booming in Uganda where it has registered players like Samona, Skin Doctor, Movit, among others.

### Project Costs:

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Electric Mixer	No.	1	400	400
Pails	No.	2	20	40
Bamboo Stick	No.	1	20	20

Soap molds	No.	5	50	250
Strings	Meters	20	1	20
Measuring Cups	No.	2	5	10
Blender	No.	1	10	10
Weighing Scale	No.	1	70	70
Delivery Van	No.	1	7,000	7,000
<b>Total Amount</b>				<b>7,820</b>

#### 2. Production and Operating Costs in US\$

##### (a) Direct Materials, Supplies & Costs

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Caustic Soda	Kgs	0.18	50	9	234	2,808
Coloring Powder	Kgs	4	5	20	520	6,240
Essential oil	Litres	6	10	60	1,560	18,720
Spring Fragrance	Litres	10	5	50	1,300	15,600
Lanolin	Litres	26	5	130	3,380	40,560
CDEA	Kgs	4.25	5	21	553	6,630
Aloe vera	Litres	9	50	450	11,700	140,400
Silicate	Litres	20	5	100	2,600	31,200
Sodium	Kgs	0.43	5	2	56	671
<b>Sub total</b>				<b>842</b>	<b>21,902</b>	<b>262,829</b>
<b>General Costs (Over heads)</b>						
Rent					200	2,400
Labour					600	7,200
Utilities (Power &Water)					500	6,000
Repair & Maintenance					300	3,600
Fuel					1,000	12,000
Depreciation(Asset write off) Expenses					929	11,152
<b>Sub - total</b>					<b>3,529</b>	<b>42,352</b>
<b>Total Operating Costs</b>					<b>25,431</b>	<b>305,181</b>

#### 3. Project Product Costs and Price Structure

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
H. Soap	200	62,400	4.9	305,181	5.2	324,480

#### 4. Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	1,040	27,040	324,480
Less: Production & Operating Costs	842	25,431	305,181
Profit	198	1,609	19,299

#### Sources of Supply of Equipment and Rawmaterials:

Equipments and Rawmaterials are readily available in Ugandan markets in the Chemicals Shops and Aloe vera farmers.

#### Government Incentives

The Government has encouraged her citizens to improve on their Health and has encouraged Investors to invest in this sector through provision of Land, Tax exemptions and liberalized market.

## BUSINESS IDEA FOR MAKING MANHOLE COVERS



### Introduction:

A **manhole cover** is a removable plate forming the lid over the opening of a [manhole](#), to prevent anyone from falling in and to keep

unauthorized persons out. They usually feature "pick holes," in which a hook handle is inserted to lift them.

### Production Capacity

This project will produce **100** Manhole covers per day.

### Production Process

Manhole covers are generally made using [sand casting](#) techniques.

### Equipment

The Essential tools and equipments required include:

1. Mortar Mixer & Moulds
2. Spades & Wheel barrows
3. Water tanks
4. Cutters
5. Finishers

*NB: These tools & equipments can be purchased from "Shauriyako" shopping centre-Kampala, Uganda.*

### Scale of Investment, Capital Investment Requirements and Equipment

The scale of Investment is estimated at US\$ **33,659**.

### Market Analysis

Construction is a booming sector; therefore, Manhole covers are on high demand especially in Drainage construction, Hotel sites, Road construction- side walk ways, Telecommunication, Tunnels, Residential and Commercial buildings. This sector has grown tremendously which has included players such as; Master Industries, Uganda Clays, Lweza Clays, and so many small scale projects.

### Project Costs

The Projected costs of production both fixed and working capital are summarized in the Tables below:

#### 1. Fixed Capital Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Truck	No.	1	10,000	10,000
Mortar Mixer	No.	1	2,000	2,000
Moulds	No.	4	5	20
Spades	No.	2	2	4
W.barrows	No.	2	30	60
Water tank	No.	1	100	100
Cutters	No.	2	15	30
Finishers	No.	2	5	10
Sieve tray	No.	1	50	50
<b>Total Amount</b>				<b>12,274</b>

#### 2. Production & Operating Costs in US\$

a. Direct Materials, Supplies and Costs						
Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Lake Sand	Trps	150	0.2	30	780	9,360
Swampy Sand	Trps	100	0.08	20	520	6,240
Sand Stones	Trps	200	0.04	8	208	2,496
Wire Mesh	Roll	250	0.04	10	260	3,120
B. Wire	Roll	100	0.04	4	104	1,248
Cement	Kgs	0.3	865.4	260	6,750	81,001
<b>Sub total</b>				<b>332</b>	<b>8,622</b>	<b>103,465</b>
<b>b. General Costs (Over heads)</b>						
Rent					300	3,600
Labour					800	9,600
Utilities (Power &Water)					500	6,000
Repair & Maintenance					300	3,600
Fuel					1,000	12,000
Depreciation (Asset write off) Expenses					256	3,069
<b>Sub - total</b>					<b>3,156</b>	<b>37,869</b>
<b>Total Operating Costs</b>					<b>11,778</b>	<b>141,334</b>

#### 3. Project Product Costs and Price Structure:

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
Manhole covers	100	31,200	4.52	141,334	6	187,200

#### 5. Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	600	15,600	187,200
Less: Production & Operating Costs	332	11,778	141,334
Profit	268	3,822	45,866

#### Sources of Supply of Equipment and Rawmaterials

Equipments and Rawmaterials are locally available in Uganda especially Lake sand from lake shores and fine sand from wet lands.

#### Government Incentives

The Government has subsidized the Building & Construction sector through tax exemptions.

## BUSINESS IDEA FOR MAKING OF CANE FURNITURE - CHAIRS



### Introduction

This profile envisages the establishment of a plant that produces Cane Furniture with a capacity of **46 sets** of Cane Chairs per annum. Cane chairs can be a beautiful addition to almost any home decor, Hotels, Recreation

centres and on foreign market. Cane furniture has a simple elegance that seems to fit well almost anywhere.

### Production Capacity

Given the complicated process in the making of Cane chairs, it is projected that at least **4 Sets (16 chairs)** may be produced in a month giving a total of **46 sets** of Cane Chairs per annum.

### Production Process

Cane chairs are made from Canes being cut to the required size and design which are fixed in the chair frames using nails. These will intertwine to make comfortable and sturdy cane furniture. The chairs' frames will be created from larger specimens of cane or timber, and the smaller are used for the features that will be added to the frame later in the construction process.

### Raw Materials

Cane, Hard timber and Nails are the major Raw materials used in the making of Cane chairs.

### Equipment

The major Equipment needed in the process of making cane chairs includes: Carpentry Kit & Sea saws.

### Scale of Investment, Capital Investment Requirements

The total investment cost to start this project is estimated at **USD 5,525.6**.

### Market Analysis

Given the fact that Cane chairs are durable and Comfortable, there is a high demand and use in Residences, Hotels and Recreation Centres. They can also be exported too. The best example of participating parties in this Industry includes; ORCA, Hwangung, Nina Interiors, plus so many small scale projects spread all over Uganda.

### Project Costs

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Carpentry Kit	No.	1	500	500
Sea saws	No.	2	25	50
<b>Total Amount</b>				<b>550</b>

#### 2. Operating Costs in US \$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Timber	Pcs	5	8	40	1,040	12,480

### BUSINESS IDEAS

Cane	Bdls	20	4	80	2,080	24,960
Nails	Kgs	2	2	4	104	1,248
Vanish	Ltrs	4	4	16	416	4,992
Cushions	Pcs	3	8	24	624	7,488
<b>Sub total</b>				<b>164</b>	<b>4,264</b>	<b>51,168</b>
<b>General Costs (Over heads)</b>						
Rent					200	2,400
Labour					400	4,800
Utilities (Power & Water)					100	1,200
Depreciation (Asset write off) Expenses					11.5	138
<b>Sub - total</b>					<b>711</b>	<b>8,538</b>
<b>Total Operating Costs</b>					<b>4,975</b>	<b>59,706</b>

### 3. Project Product Costs & Price Structure

Item	Qty/day	Qty/yr	Unit Cost	Pdn Cost/yr	Unit price	T/rev \$
Cane Chairs	4	1,248	47.8	59,706	56	69,888

### 4. Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	224	5,824	69,888
Less: Production & Operating Costs	164	4,975	59,706
<b>Profit</b>	<b>60</b>	<b>849</b>	<b>10,182</b>

### Sources of Supply of Equipment and Rawmaterials

Quality cane is imported from Democratic Republic of Congo.

### Government Incentives

The following incentives are available from government: Tax exemptions, Land & Grants in a bid to promote the informal sector.

## BUSINESS IDEA FOR MAKING OF READY MADE GARMENTS - JEANS



### Introduction

The business of ready made garments is increasing day by day due to changes of fashions in human life. In the RMg sector Jean pants are showing good

growth in local and export market. There are a number of branded Ready made garments manufacturing Units in Uganda. These days several companies are into the business of making jeans pants and also supplementary items like buttons and zips.

### Production Capacity

The production Capacity projects at least at 312,000 Garments per annum will be produced.

### Production Process

The manufacturing process depends on skills of the workers. Required cloth to be cut into required sizes and design as per the measurements of the latest designs. Then the required lining, button stitching and zip are added to the semi finished fabric and finished garments are ready for packing and marketing.

### Scale of Investment, Capital Investment Requirements

The total project investment cost of the project is estimated at USD **348,931**.

### Market Analysis

The demand for RMg is increasing at around 18-20 % annually in the country. The popularity of jean pants is good among youths and fashion conscious public. The domestic market and the export market are growing rapidly and the unit for manufacturing can be run quite successfully if they can tap the market. However, this sector is not yet developed in Uganda as most of these items are being imported.

### Project Costs

#### Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Zig-zag Machine	No.	1	175	175
Iron Boxes	No.	2	50	100
Wooden racks	No.	2	73	146
Furniture	No.	3	30	90
Sewing machine	No.	1	190	190
Embroidery machine	No.	1	130	130
<b>Total Amount</b>				<b>831</b>

#### 1. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Fabric	Mtrs	3.2	4,000	12,800	332,800	3,993,600
Threads	No.	1	200	200	5,200	62,400
Zips	No.	0.25	1,000	250	6,500	78,000
Buttons	No.	0.05	1,000	50	1,300	15,600
<b>Sub total</b>				<b>13,300</b>	<b>345,800</b>	<b>4,149,600</b>
<b>General Costs (Over heads)</b>						

Rent	500	6,000
Labour	800	9,600
Utilities (Power & Water)	1,000	12,000
<b>Sub - total</b>	<b>2,300</b>	<b>27,600</b>
<b>Total Operating Costs</b>	<b>348,100</b>	<b>4,177,200</b>

#### 2. Project Product Costs & Price Structure

Item	Qty/day	Qty/yr	Unit Cost	Pdn Cost/yr\$	Unit price	T/rev
Garments	1000	312,000	13.4	4,177,200	15	4,680,000

#### 3. Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	15,000	390,000	4,680,000
Less: Production & Operating Costs	13,300	348,100	4,177,200
Profit	1,700	41,900	502,800

#### Sources of Supply of Equipment and Raw Materials

The Raw materials can be sourced locally from Knitting Industries such as: Picfare, Phoenix. Equipments could be imported from Italy and German.

#### Government Incentives

The Government is willing to support Industrialisation as its initiative for Development. There are incentives to industrialists in form of: Tax exemptions, Land, Basic infrastructure, Protectionism, Grants and long term Loans at relatively low interest rates and liberalized market.

## BUSINESS IDEA FOR MAKING YOGHURT

### Introduction



This profile envisages the establishment of a plant that produces Yoghurt generically known as cultured milk as they all derive from the action of bacteria on all or part of the Lactose to produce Lactic acid, carbon dioxide

acetic acid, diacetyl, acetaldehyde and several other components that give the products the characteristic of fresh taste and smell.

### Production Capacity

This plant will be established on the premise that at least **1,000litres** of yoghurt will be produced per day leading to **30,000litres** per month.

### Production Process:

Yoghurt is made through the process of fermenting milk by the addition of bacteria, stabilizers, flavours and colour. The milk may be whole full fat, semi skimmed or low fat skimmed milk depending on the type of yoghurt you intend to make. It is normal in commercial yoghurt production to homogenise the milk prior to its fermentation.

### Raw Materials:

The major raw materials used to make yoghurt include: Milk, Milk powder, Stabilisers, Sugar, Flavour, Colour and lactic cultured.

### Equipment:

The major Equipment needed in the making of yoghurt includes: Packaging machine, Milk tanks, & Refrigerators.

**Scale of Investment, Capital Investment Requirements:** The total investment cost of the project including working capital for the first Year of operation is estimated at **USD 694,565**.

### Market Analysis & Projected Demand:

There is a ready market for Yoghurt among the Youths and Children who cherish the product. The major key players in this industry includes; Fresh Dairy, Jesa Farm Supplies, Fidodido, among others.

### Project Costs in US\$

#### 1. Capital Investment Requirements:

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Delivery Van	No.	1	10,000	10,000
Milk Truck	No.	1	15,000	15,000
Refrigerators	No.	2	500	1,000
Packaging Machine	No.	1	10,000	10,000
Milk Tanks	No.	2	250	500
<b>Total Amount</b>				<b>36,500</b>

#### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Milk	Litres	0.3	1,000	300	7,800	93,600
Starter	Litres	50	10	20	520	6,240
Flavour	Kgs	25	50	1,250	32,500	390,000
Food Colour	Kgs	20	10	200	5,200	62,400
<b>Sub total</b>				<b>1,770</b>	<b>46,020</b>	<b>52,240</b>
<b>General Costs (Over heads)</b>						
Rent					600	7,200
Packaging					6,500	78,000
Labour					1,000	12,000
Utilities (Power & Water)					1,000	12,000
Repair & Maintenance					500	6,000
Fuel					1,500	18,000
Depreciation (Asset write off) Expenses					760	9,125
Sub - total					<b>11,860</b>	<b>142,325</b>
<b>Total Operating Costs</b>					<b>57,880</b>	<b>94,565</b>

### 3. Project Product Costs and Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	U. price	T/rev
Yoghurt	1000	312,000	2.23	694,565	3	936,000

### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	3,000	78,000	936,000
Less: Production & Operating Costs	1,770	57,880	694,565
<b>Profit</b>	<b>1,230</b>	<b>20,120</b>	<b>241,435</b>

### Sources of Supply of Equipment and Rawmaterials

Milk which is the prime raw material for Yoghurt making will be supplied locally from milk collecting centres especially in Western and Central parts of Uganda. Equipments may also be sourced locally.

### Government Incentives

The Government has tried to improve on the Transport and Communication Network, it has also removed tax levy on agricultural products in a bid to promote Agro-processing industry in Uganda.

## BUSINESS IDEA FOR MAKING NATURAL RUBBER ADHESIVES



### Introduction

This profile envisages the establishment of a plant that will manufacture Adhesives from Natural Rubber based on the capacity of **500 liters** per day. An **adhesive**, or **glue**, is a **mixture** in a **liquid** or semi-liquid state that **adheres** or bonds items together.

Production Process: Adhesives **cure** (harden) by evaporating a solvent (Most adhesives cure at room temperature) or by exposing them to an elevated temperature. The rubber compositions are packed together by molding them into thin coatings between a release film and a porous substrate to allow curing. The resultant product has highly desirable bonding and release.

### Scale of Investment, Capital Investment Requirements

The total Capital Investment cost to start this project is estimated at **USD 8,400**.

### Market Analysis

The demand for Adhesives is very high in the Paper products industry, Schools, Offices and Craft projects. The major key player in this Industry is NOBLE Synthetics (U) Limited.

### Project Costs

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Delivery Van	No.	1	7,000	7,000
Mixer	No.	1	500	500
Boiler	No.	1	500	500
Rollers	No.	2	200	400
<b>Total Amount</b>				<b>8,400</b>

#### 2. Operating Costs in US\$

Item	Units	Unit Cost \$	Qty/day	Prod. Cost/day\$	Prod. Cost/month\$	Prod. Cost/Year [1]\$
<b>Direct Costs</b>						
Rubber	Kgs	3.77	500	1885	49010	588120
<b>Sub total</b>				<b>1,885</b>	<b>49,010</b>	<b>588,120</b>
<b>General Costs (Over heads)</b>						
Rent					500	6,000
Packaging Material					300	3,600
Labour					800	9,600
Utilities (Power & Water)					600	7,200
Repair & Servicing					500	6,000
Fuel					500	6,000
Depreciation(Asset write off) Expenses					175	2,100
<b>Sub - total</b>					<b>3,375</b>	<b>40,500</b>
<b>Total Operating Costs</b>					<b>52,385</b>	<b>628,620</b>

#### 3. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr	Unit price	T/rev
Adhesive	500	156,000	4.03	628,620	5	780,000

#### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	25,00	65,000	780,000
Less: Production & Operating Costs	1,885	52,385	628,620
<b>Profit</b>	<b>615</b>	<b>12,615</b>	<b>151,380</b>

#### Sources of Supply of Equipment and Raw Materials

Equipments and Raw materials are readily available in Uganda.

#### Government Incentives

The Government is willing to support industrialization through; Tax exemptions, Basic infrastructure, Grants, long term Loans and a liberalized market.

## BUSINESS IDEA FOR MAKING CHILLI SAUCE



### Introduction

Chilli sauce is hot in taste and eaten either as raw or cooked for its hot flavor. Chilli or Pepper is used to make a variety of sauces and chilli pickles.

### Production Capacity

The Rated Plant capacity is 500ltrs/day

### Production Process

Chilli sauce is made following the steps outlined below:

1. Cut chillies roughly;
2. Peel & chop garlic;
3. Measure the capacity of your bottle with the jug & water;
4. Add chillies garlic to the jug & enough vinegar to make the volume you need;
5. Transfer these to a pan;
6. Add 5 teaspoons of salt, and a teaspoon of sugar;
7. Heat to boil;
8. Blend this mixture until smooth;
9. Re-heat in the pan; &
10. Pour into your bottle using the jug.

### Raw Materials/Ingredients

Hot Paper, Salt, Mustard oil, Vinegar, Chillies and Garlic

### Equipment

The Essential tools and equipments required for Chill Manufacturing includes: Food-blender, a sauce pan, graduated jug & a clean bottles.

### Scale of Investment, Capital Investment Requirements and Equipment

The project will be operated locally on small scale, i.e. producing at least **500ltrs** of processed Chilli per day (15,000ltr/month). The total Fixed and Working Capital Investment required to start this project is estimated at **USD 25,639**.

### Market Analysis:

Chilli may be sold locally in Super markets, Whole sale shops, Groceries and Hotels. It can also be exported. The major player in this sector is Britania Allied Industries in Uganda.

### Project Costs

The Projected costs of production both fixed and working capital and are summarized in the Table below:

### 1. Capital Investment in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Delivery Van	No.	1	6,000	6,000
Food Blender	No.	1	250	250
Sauce Pan	No.	2	100	200
Gas Cooker	No.	1	500	500
Jug	No.	1	5	5
<b>Total Amount</b>				<b>6,955</b>

### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Hot pepper	Kgs	1	500	500	13,000	156,000
Vinegar	Litrs	3	50	150	3,900	46,800
Garlic	Kgs	2	50	100	2,600	31,200
Packaging	Botls	0.4	500	200	5,200	62,400
Salt	Kgs	0.5	20	10	260	3,120
<b>Sub total</b>				<b>960</b>	<b>24,960</b>	<b>299,520</b>
<b>General Costs (Over heads)</b>						
Rent					600	7,200
Labour					1,000	12,000
Utilities (Power &Water)					300	3,600
Repair & Maintenance					500	6,000
Gas					500	6,000
Fuel					500	6,000
Depreciation (Asset write off) Expenses					145	1,739
<b>Sub - total</b>					<b>3,545</b>	<b>42,539</b>
<b>Total Operating Costs</b>					<b>28,505</b>	<b>361,185</b>

### 3. Project Product Costs & Price Estimate in US\$

Item	Qty/day	Qty/yr	Unit Cost	Pdn Cost/yr	Unit price	T/rev
Chill Sauce	500	156,000	2.2	342,059	3	468,000

### 3. Profitability Analysis:

Profitability Item	Per day	Per Month	Per Year
Revenue	1,500	39,000	468,000
Less: Production & Operating Costs	960	28,505	342,059
<b>Profit</b>	<b>540</b>	<b>10,495</b>	<b>125,941</b>

### Sources of Supply of Equipment and Raw Materials

Raw materials will be supplied from Hot pepper growing areas of Uganda especially in the North and Central regions. Equipments are also readily available on Ugandan market.

### Government Incentives

The following incentives are available from Government in her bid to promote Agriculture and prosperity for all programs. These include: Capital/Input, Tax exemptions, Land, Basic infrastructure, Grants and long term Loans at relatively low interest rates and liberalized market. Private Sector Foundation of Uganda has finances to support this type of venture.



## BUSINESS IDEA FOR ESTABLISHING A CUPCAKE MANUFACTURING PLANT



### Introduction

Cupcakes are small sweet individual sized sponge cakes which are often decorated with icing, frosting and other decorations. The demand for cupcakes is very high all over the country especially in Bakeries and Confectionaries as well as Ice cream

producers. It is estimated that the initial investment requirements for the first month of operation is USD 5,187.5.

### Production Capacity

The production capacity is estimated at 1,000 Cupcakes per day.

### Process

Cupcakes can be baked directly in a patty tin which is similar but smaller than a muffin tin. They are most often baked in paper cases - either plain white cases or coloured decorated cases. Basic Cupcake Mix

The basic mixture for a cupcake recipe is the same as for many other large sponge cake recipes with the basic mixture consisting of:

50g/2oz self raising flour

50g/2oz Caster sugar (superfine)

50g/2oz Butter or margarine (shortening)

1 Egg

N.B: These quantities are enough to make about 10 very small cupcakes, about 5cm/2-inches in diameter and can be doubled or trebled as required

### Tools & Equipments

The Essential tools and equipments required include: Measuring Cups, Measuring Spoons, Electric Mixer or Hand Mixer, Spatula, Sheet Pans or Cupcake Pans and Oven Thermometer.

### Market Analysis

The demand for cupcakes is spread all over the country especially in urban centres, Schools, Hospitals and Hotels. This sector has registered a huge number of investors almost in all Bakeries and Confectionaries.

### Project Costs

The Project Costs are summarized in the Tables below:

#### 1. Capital Investment

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Delivery Cycles	No.	2	1,000	2,000
Mixer	No.	1	250	250
Cup cake Pans	No.	10	25	250
Gas Cooker	No.	1	500	500
Spatula	No.	1	20	20
Thermometer	No.	1	15	15
Measuring Spoon	No.	1	5	5
Measuring Cup	No.	1	5	5
<b>Total Amount</b>				<b>3,045</b>

#### 2. Operating Costs

Item	Units	Unit Cost \$	Qty/day	Prod. Cost/day\$	Prod. Cost/month\$	Prod. Cost/Year [1]\$

#### Direct Costs

Item	Units	Qty	Unit Cost\$	Amount \$
Flour	Kgs	0.75	500	375
Margarine	Kgs	3.5	5	18
Baking Powder	Kgs	1.2	2	2.4
Eggs	Trays	2.5	4	10
Sugar	Kgs	1.1	40	44
<b>Sub total</b>				<b>449</b>

#### General Costs (Over heads)

Rent	200	2,400
Packaging	260	3,120
Labour	300	3,600
Utilities (Power & Water)	200	2,400
Repair & Maintenance	500	6,000
Gas	500	6,000
Fuel	200	2,400
Depreciation (Asset write off) Expenses	63.44	761
<b>Sub - total</b>	<b>2,223</b>	<b>26,681</b>
<b>Total Operating Costs</b>	<b>13,895</b>	<b>166,738</b>

#### 3. Project Product Costs & Price Structure

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
Cup cakes	1000	312,000	0.53	166,738	0.6	187,200

#### 4. Profitability Analysis:

Profitability Item	Per day	Per Month	Per Year
Revenue	600	15,600	187,200
Less: Production & Operating Costs	449	13,895	166,738
<b>Profit</b>	<b>151</b>	<b>1,705</b>	<b>20,462</b>

#### Sources of Supply of Equipments and Rawmaterials

Raw materials are readily available from Uganda Flour Mills and Shops. These tools & equipments can locally be fabricated in Uganda.

#### Government Incentives

The following incentives are available from Government in her bid to encourage Industrialization. These include: low tax rates on some industrial inputs, a liberalized Market, gazetting industrial plots e.t.c.

This project will be run on a small scale basis where at least 500 Cupcakes will be manufactured in a day. The Fixed Capital Investment Costs required to start this project are estimated at USD 3,045.

## BUSINESS IDEA FOR DRY CLEANER SERVICES



### Introduction

Dry cleaning uses non-water-based solvents to remove soil and stains from clothes. It involves cleaning of clothing and textiles using an organic solvent rather than water. The solvent used is typically tetrachloroethylene (perchloroethylene), in the industry and "dry-cleaning fluid" by the public. Dry cleaning is necessary for cleaning items that would otherwise be damaged by water and [soap](#) or [detergent](#)s. It is often used instead of hand washing delicate fabrics, which can be excessively laborious.

### Production Capacity

It is estimated that 100 garments will be cleaned per day.

### Raw Materials

The Raw materials required is Solvents, i.e.: Tetrachloroethylene

### Process

A dry-cleaning machine is similar to a combination of a domestic [washing machine](#), and [clothes dryer](#). Garments are placed into a washing/extraction chamber (referred to as the basket, or drum), which is the core of the machine. The washing chamber contains a horizontal, perforated drum that rotates within an outer shell. The shell holds the solvent while the rotating drum holds the garment load. The basket capacity is between about 10 and 40 kg (20 to 80 lb). A typical wash cycle lasts for 8–15 minutes depending on the type of garments and degree of soiling

### Equipment

The Essential tools and equipments required are;

Dry cleaning machine

Flat Iron

Garment bags

Ironing board

Clothes' hangers and;

Chairs

All the above equipments are readily available in Uganda.

### Scale of Investment & Capital Investment Requirements

From this scale of investment, it is estimated at least 100 garments will be cleansed in a day. The Fixed & Working Capital Investment Costs for the first month of operation is estimated at USD 8,807

### Market Analysis

The demand for dry cleaning services is very high in the City and busy Urban & Trading Centres. In Uganda, there are a big number of Investors in this sector ranging from Formal to Informal, among them will include; Real Dry Cleaning Services, Fine Dry Cleaners, Spot Dry Cleaners, among others.

### Project Costs

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Delivery Van	No.	1	5,000	5,000
Dry Cleaning Machine	No.	1	250	250
Flat Iron	No.	1	50	50

Garment Bags	No.	20	5	100
Ironing Board	No.	1	50	50
Cloth Hangers	No.	50	0.25	13
Office Chair	No.	1	30	30
<b>Total Amount</b>				<b>5,493</b>

#### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Water	Ltrs	0.013	800	10	300	3,600
Detergents	Ltrs	5	10	50	1,500	18,000
<b>Sub total</b>				<b>60</b>	<b>1,800</b>	<b>21,600</b>
<b>General Costs (Over heads)</b>						
Rent					300	3,600
Labour					300	3,600
Utilities (Power)					200	2,400
Repair & Maintenance					300	3,600
Fuel					300	3,600
Depreciation (Asset write off) Expenses					114.4	1,373
<b>Sub - total</b>					<b>1,514</b>	<b>18,173</b>
<b>Total Operating Costs</b>					<b>3,314</b>	<b>39,773</b>

#### 3. Project Product Costs & Price Structure

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
Clods	100	36,500	1.09	39,773	2	73,000

#### 4. Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	200	5,200	62,400
Less: Production & Operating Costs	60	3,314	39,773
<b>Profit</b>	<b>140</b>	<b>1,886</b>	<b>22,627</b>

#### Source of Supply of Equipment and Rawmaterials:

Equipments and Rawmaterials can be sourced locally in Super markets and Chemical Shops in Uganda.

#### Government Incentives

The Government is ready and willing to provide subsidized facilities to the service Industry in form of Tax exemptions among others.

## BUSINESS IDEA FOR ESTABLISHING A DAIRY FARM



### Introduction

Dairy farm is a class of [agricultural](#), or an [animal husbandry](#) enterprise, for long-term production of [milk](#), usually from [dairy cows](#) but also from [goats](#) and [sheep](#), which may be either processed on-site or transported to a dairy factory for processing and eventual retail sale. It is a lucrative Business which can fetch big profits due to the increasing and ready market for Dairy products.

### Production Capacity

The production capacity is based on the quality and number of animals raised on the farm. However, for 5 Friesian Cows, 100ltrs of milk will be produced as each Dairy Animal is capable of producing 20 Litres of milk per day.

### Scale of Investment, Capital Investment Requirements and Equipment

This project will be operated locally on small scale, i.e. 5 Friesian Cows operated on 5 acres of land. The Fixed Capital Investment required to start this project is approximately US\$ **5,646**.

### Market Analysis

There is a high demand for dairy products in rban Centres of Uganda especially in schools, hospitals, households, and Dairy processing industry. However, they may also be exported. The best example of a well established Dairy Farm is Sameer Agric and Livestock Farm, and other farmers spread across the country.

### Project Costs

#### Fixed Capital Requirements

##### 1. Capital Investment in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Land	Acres	5	10,000	50,000
Cows	No.	5	600	3,000
Field Van	No.	1	6,000	6,000
Milk Cans	No.	5	50	250
Milk Filters	No.	2	10	20
Clamps	No.	2	20	40
Barns & Shelters	No.	2	500	1,000
Spraying Pump	No.	1	25	25
Injectors	No.	2	8	15
Spades & Pangas	No.	4	2	6
Weighing Scale	No.	1	100	100
Water Basins	No.	5	10	50
Harmer	No.	1	4	4
Wheel Barrows	No.	2	30	60
Hand Hoe & Rake	No.	2	2	4
Thermometer	No.	1	10	10
Milk Cups	No.	5	5	25
Water Tanks	No.	2	100	200
Feeding Troughs	No.	5	10	50
<b>Total Amount</b>				<b>60,859</b>

##### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/d	Prod. Cost/	Prod. Cost/
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				ay	month	Year
<b>Direct Costs</b>						
Feeds	Kgs	0.75	500	375	11,250	135,000
Drugs	M/gS	20	5	100	3,000	36,000
Calcium/ Salt	Kgs	0.5	10	5	150	1,800
Water	Litres	0.0025	600	1.5	45	540
<b>Sub total</b>				<b>482</b>	<b>14,445</b>	<b>173,340</b>
<b>General Costs (Over heads)</b>						
Labour					300	3,600
Repair & Maintenance					200	2,400
Ropes					10	120
Fuel					400	4,800
Depreciation(Asset write off) Expenses					163.73	1,965
<b>Sub - total</b>					<b>1,074</b>	<b>12,885</b>
<b>Total Operating Costs</b>					<b>15,519</b>	<b>186,225</b>

### 3. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
Milk	3000	936,000	0.2	186,225	0.4	374,400

### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	1,200	31,200	374,400
Less: Production & Operating Costs	482	15,519	186,225
<b>Profit</b>	<b>719</b>	<b>15,681</b>	<b>188,175</b>

### Sources of Supply of Raw Materials:

Raw materials will be locally sourced from farmers who have already invested in the sector and from Animal Husbandry Research Organisations & Centres in Uganda.

### Government Facilities and Incentives Available:

The following incentives are available from Government in her bid to promote Agriculture and prosperity for all programs. These include: Capital/Input in form of Friesian calves, Tax exemptions, Land, Basic infrastructure, Grants and long term Loans at relatively low interest rates and liberalized market.

## BUSINESS IDEA FOR MAKING LEATHER TOYS



### Introduction:

Leather toys are increasingly becoming popular in the recreation centers and Educational Institutions. There are various sizes of toys being manufactured. The leather toys are used for decorative purpose.

### Tools Needed:

These include: a cutting-mat big enough for the work you plan to do, a hammer or hammers, hole punches, Thonging chisel, Edge bevelers, Bone folder, Strap cutter, Gougers, Groovers, Creasers, Lacing Pony and Needles and thread.

**Raw materials:** These include: Leather, Fabrics and Pigments & Dyes.

### Production Capacity, Technology and Process

The manufacturing of leather toy products does not require complicated technology provided that one has the necessary art & craft skills to make them. The production capacity is based on the size and type of the toys made. With medium size, it is projected that at least 5 toys can be made every day.

### Production Process:

The process of making leather toys is simple and involves cutting, and moulding them according to the required size and design or shape.

### Scale of Investment, Capital Investment Requirements and Equipment:

This project will be operated on a small scale, where at least 150 leather toys will be manufactured per month. The Fixed Capital Investment required to start this project is approximately **436USD**.

### Market Analysis:

The demand for leather toys is very high both by households and institutions visa viz recreational and educational institutions. There is also an export market potential. The key players in this industry are spread all over Tourist Camps, Recreation Centres, and Educational Centres.

### Project Costs

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Cutting Mat	No.	1	50	50
Harmers	No.	2	3	6
Hole Punches	No.	1	10	10
Thonging Chisel	No.	1	20	20
Strap Cutters	No.	2	40	80
Gougers	No.	2	20	40
Needles	No.	2	5	10
Groovers	No.	2	10	20
Creasers	No.	2	60	120
Edge Bevelers	No.	2	15.00	30
Bone Folder	No.	1	50	50

<b>Total Amount</b>	<b>436</b>
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#### 1. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Leather	Metres	20	10	200	5200	62400
Fabrics	Metres	2	10	20	520	6240
Lacing Pony	Roll	5	5	25	650	7,800
Threads	Roll	4	5	20	520	6,240
Pigments & Dyes	Litres	9	10	90	2,340	28,080
<b>Sub total</b>				<b>135</b>	<b>3,510</b>	<b>42,120</b>
<b>General Costs (Over heads)</b>						
Rent					200	2,400
Labour					300	3,600
Utilities (Power & Water)					200	2,400
Depreciation (Asset write off) Expenses					109	1,308
<b>Sub - total</b>					<b>809</b>	<b>9,708</b>
<b>Total Operating Costs</b>					<b>4,319</b>	<b>51,828</b>

#### 2. Project Product Costs and Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr \$	Unit price	T/rev
Leather Toys	5	1,825	28.398904	51,828	60	109,500

#### 3. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	300	7,800	93,600
Less: Production & Operating Costs	135	4,319	51,828
<b>Profit</b>	<b>165</b>	<b>3,481</b>	<b>41,772</b>

#### Sources of Supply of Equipment and Raw materials

Raw materials will be locally sourced from the Hides & Skins Industry. Equipments are available in Uganda especially in the Art and craft industry suppliers.

#### Government Incentives

Uganda is blessed with a good natural habitat for animals of different species which are the major source of raw materials in the manufacturing process.

## BUSINESS IDEA FOR MAKING PAPER BAGS



### Introduction

Paper bags can be made in any size from craft paper, which is mainly used as packaging material for various items like food, pharmaceuticals, flour, cereals and grains among others.

### Production Capacity

This plant will be able to produce 2,250 paper bags of half a kilo per day amounting to 67,500 paper bags per month.

### Process Description

Paper bag making process is very simple and the following steps are taken: (i) cutting of paper by a paper cutting machine, (ii) Drawing label lines for folding by a Die – cutter, (iii) folding using a piece of wood, and finally (iv) glueing.

### The Scale of Investment

This plant will be operated on a small scale due to high capital requirements to purchase heavy duty machinery. It is estimated that this plant will need an initial capital investment of US\$ 1,398 inclusive of the working capital for the first month of operation.

### Market Analysis

The demand for paper bags is widely spread in all sectors in the Ugandan economy due to government’s policy of abolishing use of polythene bags. This has stimulated the growth of paper bag making industries in the country. Paper bags are mainly used in factories, hospitals, clinics, hotels, retail shops, super markets, schools & markets. The production of paper bags is done on small scale especially from paper works centre spread along Nkrumah and Nasser Roads, Kampala – Uganda.

### Project Costs

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Delivery Motor Cycle	No.	1	2,000	2,000
Glue Board	No.	1	50	50
Folding Wood	No.	1	5	5
Paper Cutter	No.	1	4,000	4,000
Die Cutter	No.	1	2,000	2,000
Furniture	No.	2	30	60
<b>Total Amount</b>				<b>8,115</b>

#### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Craft paper	Rms	23	4	92	2,392	28,704
Glue	Ltrs	2.5	10	25.0	650	7,800
<b>Sub total</b>				<b>117</b>	<b>3,042</b>	<b>36,504</b>
<b>General Costs (Over heads)</b>						
Rent					200	2,400
Labour					300	3,600
Glue Brush					5	60
Utilities (Power)					300	3,600
Repair & Maintenance					300	3,600
Fuel					200	2,400
Depreciation (Asset write off) Expenses					169.4	2,029

Sub - total	1,474.4	17,689
<b>Total Operating Costs</b>	<b>4,516.4</b>	<b>54,193</b>

### 3. Project Product Costs & Price Structure

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev\$
Paper Bags	2000	624,000	0.12	76,509	0.15	93,600

### 4. Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	300	7,800	93,600
Less: Production & Operating Costs	117	4,516.4	54,193
<b>Profit</b>	<b>183</b>	<b>3,283.6</b>	<b>39,407</b>

### Sources of Supply of Raw Materials

Paper bags are made from graft paper which is available in local stationery shops in Uganda.

### Government Incentives

The Government policy is to get rid of plastic polythene bags. This establishment of a paper bag plant as an alternative will be a welcomed intervention as they are environmentally friendly. Basic infrastructure, grants and long term loans at relatively low interest rates and liberalized market are some of Government initiatives in place to assist investors.

## BUSINESS IDEA FOR MAKING ARTIFICIAL SILK FLOWER



### Introduction

There are many types of artificial flowers including those made from glass, paper, porcelain and plastic, just to name but a few. The most popular artificial flowers are made from silk. All petals are made from white silk cotton and rayon fabric, regardless of the finished colour. The demand for silk flowers arises from the fact that they last much longer than natural flowers.

### Production Capacity

The capacity of the firm depends on the type/design and size, however, it is estimated that at least 20 silk flowers can be produced per day.

### Production Technology

The process of making artificial flowers requires simple technology with a little artistic knowledge especially in flower designs.

### Process

The fabric is die-cut into many petal shapes and sizes for one single type of flower. In the first process the petals are dyed using cotton balls and paint brushes to touch colour onto the petals beginning from the edge of the petal working towards the center. The dyeing of one petal can take up to an hour of concentrated work.

### Raw Materials:

The basic raw materials include: fabrics of silk, wires, corn starch, and clear fast-drying glue.

### Equipment & Tools:

The essential tools and equipments include: Scissors, wire cutter, paint brush, sewing thread and needles, foam rubber mat, and cardboard.

### Scale of Investment & Capital Investment Requirements:

This project will be run on a small scale basis where at least 520 silk flowers will be made in a month. The fixed capital investment costs required to start this project are estimated at 86USD.

### Market Analysis:

The demand for artificial silk flowers arises from the fact that they are durable; they last longer compared to natural flowers. The market for silk flowers is very high in residential houses, factories, hotels, offices, and even overseas. Natural flowers wither in a few days and they are quite expensive. Artificial Silk flowers are mainly from Recreation centres, Tourist Camps, and Vocational Learning centres spread across the country.

### Project Costs

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Scissors	No.	2	8	16
Mat	No.	1	20	20
Card Board	No.	1	40	40
Needles	No.	2	5	10
<b>Total Amount</b>				<b>86</b>

#### 2. Operating Costs in USS

Item	Units	Unit Cost \$	Qty/d ay	Prod. Cost/ day	Prod. Cost/ month	Prod. Cost/Yr
<b>Direct Costs</b>						
Fabrics	Mtrs	4	20	80	2080	24960
Corn Starch	Ltrs	5	5	25	650	7,800
Threads	Roll	5	1	5	130	1,560
Glue	Ltrs	7	1	7	182	2,184
Pigments & Dyes	Ltrs	9	10	90	2,340	28,080
<b>Sub total</b>				<b>127</b>	<b>3,302</b>	<b>39,624</b>
<b>General Costs (Over heads)</b>						
Rent					200	2,400
Labour					300	3,600
Utilities (Power & Water)					100	1,200
<b>Sub - total</b>					<b>600</b>	<b>7,200</b>
<b>Total Operating Costs</b>					<b>3,902</b>	<b>46,824</b>

#### 3. Project Product Costs & Price Structure in US\$

Item	Qty/d ay	Qty/yr	Unit Cost\$	Pdn Cost/yr	Unit price	T/rev
Silk Flowers	20	7,300	6.4	46,824	10	73,000

#### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	200	5,200	62,400
Less: Production & Operating Costs	127	3,902	46,824
<b>Profit</b>	<b>73</b>	<b>1,298</b>	<b>15,576</b>

### Sources of Supply of Equipment and Raw Materials

The supply of inputs especially fabrics is readily available in Uganda, i.e. Phoenix International. Equipments and supplies are available in "Shauriyako" market – Kampala Uganda.

### Government Incentives

The Government is willing to promote this sector through provision of; tax exemptions, land, basic infrastructure, grants and long term loans at relatively low interest rates and liberalized market and good trade policies.

## BUSINESS IDEA FOR MAKING ICE CREAM-BALLS

### Introduction

The proposed project envisions setting up of an Ice cream balls manufacturing unit. This is an innovative concept for Ice cream product in Uganda. Ice cream is consumed more in cities. However, it is gaining popularity up-country. The consumption of ice cream is likely to increase in future.

### Technology and Process Description

Ice cream is defined as a frozen dairy product, made by suitable blending and processing of milk cream sugar, flavors, stabilizer and a creamy texture is formed by incorporation of air by agitating during the freezing process. Ice cream, which was considered a luxury food earlier on, is now a regular frozen dessert food and its popularity is increasing rapidly. Ice Cream ball is manufactured using cryogenic techniques. Cryogenics process uses liquid Nitrogen (which is totally inert and tasteless) to instantaneously freeze Ice Cream balls, to a temperature of - 187 °C (-304° F.). This rapid freezing process enables to "lock in" the flavor. Special storage freezers are required to guarantee the highest flavor quality.

### Plant and Machinery Required

- Ice cream mix preparation tanks
- Ice cream mixer
- Boiler
- Butter melting Vat
- Liquid nitrogen storage tank double wall
- Ice cream balls packing machine
- Quality control equipments
- Molding machine
- Blender

### Suggested Plant Capacity and Project Cost

The indicative project cost for manufacturing unit of Ice cream balls; with suggested capacity of **2,000 balls** per day is US \$ **23,250**.

### Market Analysis:

The demand for Ice cream is all round the year and is consumed by all classes of people. There is a steady demand for the product among youths who constitute 70% of the population. The main Investor in this field is FidoDido and others are imported.

### 1. Capital Investment Requirement in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Delivery Van	No.	1	8,000	8,000
Mixer	No.	1	3,000	3,000
Storage Tanks	No.	3	500	1,500
Preparation Tanks	No.	4	500	2,000
Molding Machine	No.	1	1,500	1,500
Q.C Equipments	Set	1	500	500
Blender	No.	1	250	250
Freezers	No.	4	1,000	4,000
Electric Boiler	No.	1	1,000	1,000
Packaging Machine	No.	1	1,500	1,500
<b>Total Amount</b>				<b>23,250</b>

### 2. Operating Cost in US \$

Item	Units	Unit Cost	Qty/ day	Prod. Cost/ day	Prod. Cost/ month	Prod. Cost/ Year
<b>Direct Costs</b>						
Milk	Litres	0.25	1000	250	6500	78000
Food Color	Kgs	0.5	50	25	650	7,800
Stabilizers	Kgs	1.5	10	15	390	4,680
Sugar	Kgs	1	200	200	5,200	62,400
<b>Sub total</b>				<b>490</b>	<b>12,740</b>	<b>152,880</b>
<b>General Costs (Over heads)</b>						
Rent					300	3,600
Packaging Material					500	6,000
Labour					600	7,200
Utilities (Power & Water)					500	6,000
Repair & Servicing					500	6,000
Fuel					500	6,000
Depreciation (Asset write off) Expenses					484.4	5,813
<b>Sub - total</b>					<b>3,384</b>	<b>40,613</b>
<b>Total Operating Costs</b>					<b>16,124</b>	<b>193,493</b>

### 3. Project Product Costs & Price Structure in US\$

Item	Qty /day	Qty/ yr	Unit Cost	Pdn Cost/ yr	Unit price	T/rev
Ice Cream Balls	2000	624,000	0.31	193,493	0.5	312,000

### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	1,000	26,000	312,000
Less: Production & Operating Costs	490	16,124	193,493
Profit	510	9,876	118,508

### Sources of Supply of Equipment and Raw Materials

Dairy products will be locally supplied from farming areas of Uganda especially Western & Central Uganda. All the necessary Equipments can be locally purchased from Uganda's Electrical & Machinery shops.

### Government Incentives

The following incentives are available from Government in her bid to promote Agro and Food Processing Industry: tax exemptions, land, basic infrastructure, grants and long term loans at relatively low interest rates and liberalized market and favourable trade policies.

## BUSINESS IDEA FOR MAKING DISPOSABLE SYRINGES



### Introduction

A syringe is a simple piston **pump** consisting of a plunger that fits tightly in a tube. The plunger can be pulled and pushed along inside a cylindrical tube (the barrel), allowing the syringe to take in and expel a **liquid** or **gas** through an **orifice** at the open end of the tube. The open end of the syringe may be fitted with a **hypodermic needle**, a **nozzle**, or **tubing** to help direct the flow into and out of the barrel. This project, therefore, proposes to install entire equipments needed for an integrated disposable syringe plant.

### Production Capacity:

It is estimated that this project will manufacture 1tonne of syringes per day giving rise to about 30 tons per month.

Technology: A disposable syringe may be simple and straight forward to look at, but it is an uneconomical and risky business to manufacture them without the necessary expertise. Hypodermic syringe production is strictly controlled by the United States government, specifically the Food and Drug Administration (FDA). They have compiled a list of specifications to which every manufacturer must **comply**. They perform inspections of each of these companies to ensure that they are following good manufacturing practices, handling complaints appropriately, and keeping adequate records related to design and production.

### Process:

One method of production is **extrusion** molding. The plastic or glass is supplied as granules or powder and is fed into a large **hopper**. The extrusion process involves a large spiral screw, which forces the material through a heated chamber and makes it a thick, flowing mass. It is then forced through a die, producing a continuous tube that is cooled and cut.

### Equipment:

The essential machinery required includes: (i) Disposable syringe moulding machine (ii) Syringe packaging machine and (iii) Fixed data flexographic printer.

### Raw Materials:

Compounded formulation plastic is used as a raw material in a syringe moulding machine to form a barrel, piston/plunger cover of a disposable plastic syringe.

### Market Analysis:

Disposable syringes are widely used by Doctors and it is the way to go world over. With the increase in population in our country, requirement for these items is a must to curb transmission of diseases. However, this sector is not yet developed in Uganda.

### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Delivery Van	No.	1	8,000	8,000
Flexographic Printer	No.	1	3,000	3,000
Molding Machine	No.	1	5,000	5,000
Plastic Melting Machine	No.	1	1,000	1,000
Weighing Scale	No.	1	100	100
Furniture	No.	5	30	150
Packaging Machine	No.	1	2,000	2,000
<b>Total Amount</b>				<b>19,250</b>

### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Sterilisable Paper	Metre	5	10	50	1300	15600
Ethylene Oxide	Litres	5	50	250	6,500	78,000
Compounded Plastics	Kgs	0.5	500	250	6,500	78,000
<b>Sub total</b>				<b>550</b>	<b>14,300</b>	<b>171,600</b>
<b>General Costs (Over heads)</b>						
Rent					400	4,800
Packaging Material					100	1,200
Labour					600	7,200
Utilities (Power & Water)					500	6,000
Repair & Servicing					500	6,000
Fuel					500	6,000
Depreciation(Asset write off) Expenses					401	4,813
<b>Sub - total</b>					<b>3,001</b>	<b>36,013</b>
<b>Total Operating Costs</b>					<b>17,301</b>	<b>207,613</b>

### 3. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr	Unit price	T/rev
Syringes	2000	624,000	0.33	207,613	0.5	312,000

### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	1,000	26,000	312,000
Less: Production & Operating Costs	550	17,301	207,613
<b>Profit</b>	<b>450</b>	<b>8,699</b>	<b>104,388</b>

### Sources of Supply of Raw Materials and Equipments

Production facilities for manufacturing Disposable syringes are supplied to Developing Countries – together with the essential know-how – by a number of German and other European companies. The required Equipments can be imported from India.

### Government Incentives

The following incentives are available from Government in her bid to promote Health and wellbeing of the people and they include: Capital incentives, tax exemptions, land, basic infrastructure, and grants.



## BUSINESS IDEA FOR FRUIT JUICE CANNING



### Introduction

**Fruit Juice Canning** is a method of preserving fruit juice sealed in an airtight container which prevents microorganisms from entering and proliferating inside. The products may include:

Canned fruit cocktail consisting of a mixture of fruits, such as; mangoes, tangerine lemons, apples, and passion fruits. There is an increasing demand for canned Fruits as they can be sold in both local and foreign markets.

### Production Capacity

It is projected that at least **100 Dozens of 300m litres (1,400 ltrs)** of canned juice can be produced a day.

### Tools & Equipment

The essential tools and equipment required include: Juicers & Sprouters, Gas Cooker, Cutting board, Jar lifter, clean cloths, Can Sealer, Canning jars, Lids and bands, Custom Canning Labels and Timer or Clock.

### Production Technology & Process

The canning process involves placing fruit Juice in jars or similar containers and heating them to a temperature that destroys micro-organisms that cause food to spoil. During this heating process air is driven out of the jar and as it cools a vacuum seal is formed. This vacuum seal prevents air from getting back into the product bringing with it contaminating micro-organisms.

**Scale of Investment, Capital Investment Requirements and Equipment:** This project may be operated on both small and large scale depending on the size and nature of the market. The fixed capital investment required to start this project is approximately **10,454USD** as shown in the table below:

**Raw Materials Requirements for 12 Months:** It is projected that in a month, at least **42,000 kgs** of fruits, **36,000** jar cans & labels are required to meet the projected production capacity. Summary is given in the table below:

### Market Analysis

The demand for canned juice is very high in Super markets and hotels; and may also be exported to neighboring countries. Foreign markets will constitute about 80% of the total market size. Britania Allied Industries, Delight Supplies among others are examples of the key players in this Industry.

### Project Costs:

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Delivery Van	No.	1	8,000	8,000
Juicer	No.	1	3,000	3,000
Gas Cooker	No.	1	5,000	5,000
Jar Lifter	No.	1	1,000	1,000
Cutting Board	No.	1	50	50
Timer	No.	1	25	25
Juice Tanks	No.	3	50	150
Boiler	No.	1	500	500
Furniture	No.	5	30	150
Packaging Machine	No.	1	4,000	4,000
<b>Total Amount</b>				<b>21,875</b>

#### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Fruits	Kgs	0.5	1000	500	13000	156000
Flavours	Kgs	1	100	100	2600	31200
Food Colour	Kgs	0.5	100	50	1300	15600
Preservatives	Kgs	5	100	500	13000	156000
Sugar	Kgs	2.1	200	420	10920	131040
Water	Litre	0.05	500	25	650	7800
<b>Sub total</b>				<b>1,595</b>	<b>41,470</b>	<b>497,640</b>
<b>General Costs (Over heads)</b>						
Rent					400	4,800
Packaging Material					500	6,000
Labour					800	9,600
Utilities (Power & Gas)					1,000	12,000
Repair & Servicing					500	6,000
Fuel					500	6,000
Depreciation(Asset write off) Expenses					456	5,469
<b>Sub - total</b>					<b>4,156</b>	<b>49,868</b>
<b>Total Operating Costs</b>					<b>45,626</b>	<b>547,509</b>

#### 3. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
Canned Juice	1200	374,400	1.46	547,509	2	748,800

#### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	2,400	62,400	748,800
Less: Production & Operating Costs	1,595	45,626	547,509
<b>Profit</b>	<b>805</b>	<b>16,774</b>	<b>201,291</b>

#### Sources of Supply of Equipment and Raw Materials:

Raw materials will be locally supplied from Eastern, Western – Kasese, North Eastern, and Central parts of Uganda which are the leading and major fruit producing regions. Equipments may be purchased from the local Machinery dealers in Uganda.

#### Government Incentives

The following incentives are available from the Government in her bid to promote Industrialization and Agro-Processing as one of its initiatives: they include: tax exemptions, land, transport and communication facilities, grants and long term loans at relatively low interest rates

# BUSINESS IDEA FOR MAKING OFFICE GLUE



## Introduction

This profile envisages the establishment of a plant that will manufacture office glue based on the capacity of **500 liters** per day. The simplest glue is that made from a paste of flour and water.

## Production Process

1. **Put plain white flour and water into a bowl** depending on how much glue you need.
2. **Mix the flour and water together until a smooth paste is achieved.** It should not be too thick or too drippy
3. **Use it soon after creating it.** It can be used to stick paper together.

## Scale of Investment, Capital Investment Requirements

The total capital investment cost to start this project is estimated at **USD 8,300.**

## Market Analysis

The demand for office glue is very high in the paper products industry, schools, offices, and craft projects. The major key player in this Industry is NOBLE Synthetics (U) Limited.

## Project Costs

### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Delivery Van	No.	1	7,000	7,000
Mixer	No.	1	500	500
Gas Cooker	No.	1	500	500
Boiler	No.	1	100	100
Bowls	No.	2	100	200
<b>Total Amount</b>				<b>8,300</b>

### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Manioc Powder	Kgs	0.5	250	125	3250	39000
Vinegar	Litres	2.5	100	250	6500	78000
Water	Litres	0.05	200	10	260	3120
<b>Sub total</b>				<b>385</b>	<b>10,010</b>	<b>120,120</b>
<b>General Costs (Over heads)</b>						
Rent					400	4,800
Packaging Material					500	6,000
Labour					800	6,000
Utilities (Power & Gas)					1,000	12,000
Repair & Servicing					500	6,000
Fuel					500	6,000
Depreciation (Asset write off) Expenses					173	2,075
<b>Sub - total</b>					<b>3,873</b>	<b>46,475</b>
<b>Total Operating Costs</b>					<b>13,883</b>	<b>166,595</b>

### 3. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
Glue	500	156,000	1.06	166,595	1.5	234,000

## 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	750	19,500	234,000
Less: Production & Operating Costs	385	13,883	166,595
<b>Profit</b>	<b>365</b>	<b>5,617</b>	<b>67,405</b>

## Sources of Supply of Equipment and Raw Materials

Raw materials are readily available in Uganda.

## Government Facilities and Incentives Available:

The Government is willing to support industrialization through; tax exemptions, basic infrastructure, grants, long term loans and liberalized market.

## BUSINESS IDEA FOR MAKING PENCILS



### Introduction

A pencil is a [writing implement](#) or [art medium](#) constructed of a narrow, solid [pigment](#) core inside a protective casing. The case provides an external scaffold to protect the structural integrity of the core, and also prevents the pigment from accidentally staining the hand during use. Pencils are widely used in the country in fields like education, carpentry, and artillery work among others, hence creating a big demand for them.

### Production Capacity

The production capacity is estimated at 6,000 dozens of pencils per day.

### Raw Materials

The most important ingredient in a pencil is the graphite, which most people continue to call lead, which is a method of combining graphite with clay and wax or other chemicals. The cedar usually arrives at the factory already dried, stained, and waxed to prevent warping.

### Process & Technology

Modern pencils are made industrially by mixing finely ground graphite and clay powders, adding water, forming long [spaghetti](#)-like strings, and firing them in a [kiln](#). The resulting strings are dipped in [oil](#) or molten [wax](#), which seeps into the tiny holes of the material, resulting in smoother writing. A juniper or [incense-cedar](#) plank with several long parallel grooves is cut to fashion a "slat," and the graphite/clay strings are inserted into the grooves. Another grooved plank is glued on top, and the whole assembly is then cut into individual pencils, which are then varnished or painted. Afterwards people can then add personal things like pencil grips and eraser toppers & Labels.

### Equipment

The Essential tools and equipments required are; Circular Saw, Grover, Eraser Tipping machine, Ferrule, Painting machine & Shaper. These equipments may be imported from China & India.

### Scale of Investment & Capital Investment Requirements

The scale of investment is estimated at **US\$12,650** where at least 6,000 dozens of pencils will be manufactured in a day.

### Market Analysis

Pencils are widely used in the country in almost all fields such as Education, Carpentry and Artillery among others; hence creating a big demand for them. Picfare – Uganda Ltd is the major key player in this Industry.

### Project Costs

The Project fixed capital requirements are summarized in the Table below:

#### Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Delivery Van	No.	1	6,000	6,000
Power Saw	No.	1	500	500
Grover	No.	1	200	200
Eraser Tipping Machine	No.	1	800	800
Ferrule	No.	1	1,000	1,000
Painting Machine	No.	1	1,000	1,000
Shaping Machine	No.	3	1,000	3,000
Furniture	No.	5	30	150
<b>Total Amount</b>				<b>12,650</b>

### 1. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Cedar	Ft	2	500	1000	26000	312000
Graphite	Kgs	1	60	60	1560	18720
<b>Sub total</b>				<b>1,060</b>	<b>27,560</b>	<b>330,720</b>
<b>General Costs (Over heads)</b>						
Rent					400	4,800
Packaging Material					200	2,400
Labour					400	4,800
Utilities (Power & Water)					400	4,800
Repair & Servicing					400	4,800
Fuel					400	4,800
Depreciation (Asset write off) Expenses					264	3,163
<b>Sub - total</b>					<b>2,464</b>	<b>29,563</b>
<b>Total Operating Costs</b>					<b>30,024</b>	<b>360,283</b>

### 2. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost	Pdn Cost/yr	Unit price	T/rev
Pencils (Dzns)	6000	1,872,000	0.19	360,283	0.25	468,000

### 3. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	1,500	39,000	468,000
Less: Production & Operating Costs	1,060	30,024	360,283
<b>Profit</b>	<b>440</b>	<b>8,976</b>	<b>107,718</b>

### Source of Supply of Equipments and Raw Materials

Equipments and Raw materials will be imported from India which has good quality materials.

### Government Incentives

The government is ready and willing to provide incentives to investors in form of land and tax exemptions among others.

## BUSINESS IDEA FOR CHEESE MAKING

### Introduction



Cheese is a product made from the curd obtained from whole or skimmed milk, with or without added cream, by coagulating the casein and further treatment, of the separated curd by ripening ferments, special molds or

seasoning.

### Production Capacity

The rated Plant capacity is **1,000kgs** per day.

### Production Process Description

Cheese is made by curdling the milk. The homogeneous fluid changes into a mixture of solid particles and a pale yellow liquid. These are separated and the solid elements make up the curd. The curd is pressed into moulds, after which the cheese goes into a brine bath for several days. Subsequently it is stored and thus gradually matures into the delicious product we can buy in the shops.

### Production Steps

Selection of milk and cream separator, setting of milk, cutting or breaking of curd, cooking curds, draining or dipping, Curd knitting, Salting & Pressing

**Raw Materials:**Milk, Disodium Phosphate, & Rennet Enzymes

### Equipment:

The Essential tools and equipments required for Cheese Manufacturing include:

Cream Separator, Molding Machine, Cheese Knives, Milk Cans (Aluminium alloy), Cheese Scoops, Weighing balance, Deep freezer, Centrifuge for fat test, Boiler, Cheese filling and packaging Machine.

### Scale of Investment, Capital Investment Requirements and Equipment:

The project will be operated locally on small scale, i.e. producing at least 350kg of processed Cheese per day (105,000.00 KGS/annum). The total Fixed Capital Investment required to establish this project is estimated at **USD 20,825**.

### Market Analysis:

The demand for Cheese is widely spread across all factions of people in Uganda as one of the essential items of daily life in the diet of the population, thus an indispensable necessity both locally and internationally. Fresh Dairy, Paramount Industries are the main Investors in thid Industry in Uganda.

### Project Costs:

The project costs are summarized in the tables below:

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Milk Van	No.	1	8,000	8,000
Cream Separator	No.	1	1,950	1,950
Molding Machine	No.	1	2,000	2,000
Cheese Vat	No.	1	325	325
C.Scoops	No.	2	100	200
Freezers	No.	2	1,000	2,000
Boiler	No.	1	1,000	1,000
Centrifuge	No.	1	500	500
Cheese Knives	No.	2	10	20
Packaging Machine	No.	1	3,000	3,000
Milk Cans	No.	20	80	1,600
Weighing Balance	No.	1	80	80
Furniture	No.	5	30	150
<b>Total Amount</b>				<b>20,825</b>

#### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/ day	Prod. Cost/day	Prod. Cost/ month	Prod. Cost/ Year
<b>Direct Costs</b>						
Milk	Litres	0.3	2,000	600	15,600	187,200
Enzymes	Litres	5	100	500	13,000	156,000
Salt	Kgs	0.3	50	15	390	4,680
Phosphate	Kgs	2	100	200	5,200	62,400
<b>Sub total</b>				<b>1,315</b>	<b>34,190</b>	<b>410,280</b>
<b>General Costs (Over heads)</b>						
Rent					500	6,000
Packaging Material					500	6,000
Labour					800	9,600
Utilities (Power & Water)					1,000	12,000
Repair & Servicing					800	9,600
Fuel					500	6,000
Depreciation(Asset write off) Expenses					434	5,206
<b>Sub - total</b>					<b>4,534</b>	<b>54,406</b>
<b>Total Operating Costs</b>					<b>38,724</b>	<b>464,686</b>

#### 3. Project Product Costs & Price Structure in US\$

Item	Qty/ day (Kg)	Qty/yr (Kg)	Unit Cost	Pdn Cost/ yr	Unit price	T/rev
Cheese	1000	312,000	1.48	521,955	3	936,000

#### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	3,000	78,000	936,000
Less: Production & Operating Costs	1,315	38,724	464,686
<b>Profit</b>	<b>1,685</b>	<b>39,276</b>	<b>471,314</b>

#### Sources of Supply of Equipment and Raw Materials

Raw materials will be locally sourced from Dairy farmers especially from Western Uganda. The necessary Equipments can be imported from China and India,

#### Government Incentives

The following incentives are available from Government in her bid to promote Agriculture and prosperity for all programs. These include: capital/Input, tax exemptions, land, basic infrastructure, grants and long term loans at relatively low interest rates and liberalized market.

## BUSINESS IDEA FOR MAKING PLASTIC ROPES



### Introduction

This business profile suggests setting up a plant that manufactures plastic Ropes. A rope is a bundle of flexible fibers twisted or braided together to increase its overall length and tensile strength. Ropes may be used for hunting, carrying, lifting, and climbing dates back to prehistoric times.

### Production technology

Fibers and filaments are first formed into yarn. The yarn is then twisted, braided, or plaited according to the type of rope being made. The diameter of the rope is determined by the diameter of the yarn, the number of yarns per strand, and the number of strands or braids in the finished rope.

### Production Process

To make plastic ropes, chemists and chemical engineers must do the following on an industrial scale:

1. Prepare raw materials and monomers
2. Carry out polymerization reactions
3. Process the polymers into final polymer resins.
4. Produce finished products.

### Production Capacity

Basing on the demand for plastic ropes, this plant will produce **1,000 ropes** per day totaling to **26,000 ropes** per month.

### Raw Materials

Ropes will be made from plastics and a combination of chemicals to give them strength, which have been processed to allow them to be easily formed and extruded into long filaments.

### Market Analysis

The demand for plastic ropes is very high especially in the fishing, building and construction, & farming industry. Plastic ropes may also be exported to neighboring countries. However, plastic ropes are imported from Kenya.

### Project Costs

The project costs to establish this plant are shown in tables below:

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Delivery Van	No.	1	8,000	8,000
Molding Machine	No.	1	3,000	3,000
Crushing Machine	No.	1	1,000	1,000
Injection Machine	No.	1	1,000	1,000
Boiler	No.	1	1,000	1,000
Furniture	No.	3	30	90
Weighing Scale	No.	1	100	100
<b>Total Amount</b>				<b>14,190</b>

#### 2. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Compounded						

Plastics	Kgs	0.2	3000	600	15,600	187,200
Chemicals	Litres	1.5	300	450	11,700	140,400
<b>Sub total</b>				<b>1,050</b>	<b>27,300</b>	<b>327,600</b>
<b>General Costs (Over heads)</b>						
Rent					500	6,000
Labour					600	7,200
Utilities (Power)					800	9,600
Repair & Servicing					500	6,000
Fuel					500	6,000
Depreciation(Asset write off) Expenses					295.6	3,548
<b>Sub - total</b>					<b>3,195.6</b>	<b>38,348</b>
<b>Total Operating Costs</b>					<b>30,495.6</b>	<b>365,948</b>

### 3. Project Product & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
Ropes	1000	312,000	1.3	404,970	1.5	468,000

### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	1,500	39,000	468,000
Less: Production & Operating Costs	1,050	30,495.6	365,948
<b>Profit</b>	<b>450</b>	<b>8,504.4</b>	<b>102,052</b>

### Sources of Supply of Equipment and Raw Materials

The major raw material is Plastics which are purchased from local individuals at a relatively cheaper price all over the country and chemicals used are readily available in chemical dealing industries & shops. Equipments can be locally fabricated in Uganda.

### Government Facilities and Incentives Available:

Government is encouraging the recycling of plastics in a bid to minimize environmental degradation in Uganda hence availability of raw materials.

## BUSINESS IDEA FOR MAKING WOODEN OFFICE CHAIRS



### Introduction

This profile envisages the establishment of a furniture plant that manufactures wooden office chairs. This plant is very profitable due to the big demand for the products especially in public and private offices.

### Production Capacity

This project will be established on the assumption that **120 chairs** will be produced per month giving an average of 4 chairs per day.

### Production Process

Office chairs are made from hard wood timber, which is cut to the required size and design, then fixed together using nails. The chair seats are made of modern seat covers.

### Raw Materials

Hard timber and nails are the major raw materials used in the making of office chairs.

### Tools and Equipment

The major tools and equipment needed in the process of making office chairs include:

1. Carpentry Equipment Kit;
2. Power Saw;
3. Molding machine; &
4. Power Drill.

### Scale of Investment, Capital Investment Requirements

The total investment cost of the project including working capital for the first month of operation is estimated at **USD 2,903**.

### Market Analysis & Projected Demand

The demand for office chairs is widespread across all sectors in the country, i.e. Education, Health, Trade, Government, Corporate, NGOs, among others. The best example of Investors in this Industry includes; ORCA, Hwangsung, Nina Interiors, plus other small scale projects spread all over Uganda.

### Project Costs

The initial investment capital requirements for one month are estimated at **US\$ 3,744**.

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost	Amount
Carpentry Kit	No.	1	400	400
Power Saw	No.	1	200	200
Molding Machine	No.	1	100	100
Power Drill	No.	1	50	50
<b>Total Amount</b>				<b>750</b>

#### 2. Operating Costs

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Timber	Pieces	8	20	160	4,160	49,920
Nails	Kgs	2	5	10	260	3,120
Vanish	Litres	4	10	40	1,040	12,480
Top seat covers	Pieces	7	10	70	1,820	21,840
<b>Sub total</b>				<b>280</b>	<b>7,280</b>	<b>87,360</b>
<b>General Costs (Over heads)</b>						
Rent				200		2,400

Labour	400	4,800
Utilities (Power & Water)	300	3,600
<b>Sub - total</b>	<b>900</b>	<b>10,800</b>
<b>Total Operating Costs</b>	<b>8,180</b>	<b>98,160</b>

#### 3. Project Product Costs & Price Structure in US\$

	Qty/day	Qty/yr	Unit Cost	Pdn Cost/yr	Unit price	T/rev
Chairs	10	3,120	31.5	98,160	35	109,200

#### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	350	9,100	109,200
Less: Production & Operating Costs	280	8,180	98,160
<b>Profit</b>	<b>70</b>	<b>920</b>	<b>11,040</b>

#### Sources of Supply of Raw Materials

Quality hard wood timber is readily available in Uganda especially from Eastern and Northern Uganda.

#### Government Facilities and Incentives Available

The Government subsidies in form of tax exemptions & grants are available for the informal sector.

## BUSINESS IDEA FOR MAKING PLASTIC BOTTLE CAPS

### Introduction



This business profile aims at setting up a plant that manufactures plastic bottle caps. **Bottle caps**, or  **closures**, are used to seal the openings of **bottles** of many types. They can be small circular pieces of **metal**, usually steel, with **plastic** backings, and for plastic bottles a plastic cap is used instead. A bottle cap is typically colorfully decorated with the **logo** of the brand of beverage.

### Production Technology

The production of plastic bottle caps is done through rotational molding whereby the resin pellets are heated and cooled in a mold that can be rotated in three dimensions. The rotation evenly distributes the plastic along the walls of the mold. This technique may also be used to make large, hollow plastic items (toys, furniture, sporting equipment, septic tanks, garbage cans and kayaks).

### Production Process

To make plastic bottle caps, chemists and chemical engineers must do the following on an industrial scale:

5. Prepare raw materials and monomers
6. Carry out polymerization reactions
7. Process the polymers into final **polymer resins**
8. Produce finished products.

### Production Capacity

Basing on the demand for bottle caps, this plant will be capable of producing 1tonn of bottle caps per day totaling to 26 tones per month.

### Tools and Equipment in US \$

1. Heater/Melting Machine
2. Molding machine
3. Plastics crushing machine
4. Injection machine
5. Weighing balance

### Raw Materials

- Recycled plastics
- Ethylene and propylene come from crude oil
- Plasticizers, dyes and flame-retardant chemicals

### Scale of Investment, Capital Investment Requirements

#### Market Analysis & Projected Demand

The demand for plastic bottle caps is very high in Drinks and Beverage Company & Health and pharmaceuticals industry. Plastic bottles may also be exported to neighboring countries such as: Rwanda, Burundi and Congo. However, plastic Bottle Caps are imported from Kenya.

### Project Costs

The project cost to establish this plant is shown below:

#### 1. Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Truck	No.	1	10,000	10,000
Injection Machine	No.	1	3,000	3,000
Molding Machine	No.	1	5,000	5,000
Plastic Melting Machine	No.	1	1,000	1,000
Weighing Scale	No.	1	100	100
Furniture	No.	3	30	90
<b>Total Amount</b>				<b>19,190</b>

### 2. Operating Costs in US\$

Item	Units	Unit Cost \$	Qty/d ay	Prod. Cost/d ay\$	Prod. Cost/m onth\$	Prod. Cost/Yea r[1]\$
<b>Direct Costs</b>						
Ethylene Oxide	Litres	5	100	500	13,000	156,000
Compounded Plastics	Kgs	0.5	1,000	500	13,000	156,000
<b>Sub total</b>				<b>1,000</b>	<b>26,000</b>	<b>312,000</b>
<b>General Costs (Over heads)</b>						
Rent					400	4,800
Packaging Material					100	1,200
Labour					600	7,200
Utilities (Power & Water)					1,000	12,000
Repair & Servicing					500	6,000
Fuel					500	6,000
Depreciation (Asset write off) Expenses					400	4,798
<b>Sub - total</b>					<b>3,500</b>	<b>41,998</b>
<b>Total Operating Costs</b>					<b>29,500</b>	<b>353,998</b>

### 3. Project Product Costs & Price Structure in US\$

Item	Qty/d ay-ton	Qty/y r	Unit Cost\$	Pdn Cost/yr\$	Unit price	T/rev
Caps	1	312	1,134.6	353,998	1,500	468,000

### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	1,500	39,000	468,000
Less: Production & Operating Costs	1,000	29,500	353,998
<b>Profit</b>	<b>500</b>	<b>9,500</b>	<b>114,003</b>

### Sources of Supply of Raw Materials

The major raw material, plastics are purchased from local individuals at a relatively cheaper price all over the country and chemicals used are readily available from chemical dealing industries & shops.

### Government Facilities and Incentives Available:

Government is encouraging the recycling of plastics in a bid to minimize environmental degradation in Uganda hence availability of raw materials cheaply.

## BUSINESS IDEA FOR PROCESSING SOYA FLOUR



### Introduction

Soya Bean is emerging as an important crop in Pallisa, Soroti, and Kumi districts of Uganda. Apart from being a source of edible oil, Soya is rich in proteins. Defatted or whole Soya is used to make innumerable products like: Soya milk, Soya flour, Soya coffee and Nugget. These products have gained consumer acceptance and a steady growth of market is expected.

### Production Capacity

It is projected that this plant will produce 1 ton (1,000kgs) of Soya flour per day.

### Production Process

Whole soya flour is made by cooking pre-soaked beans, drying, dehulling, and powdering. Soya Nuggets and Soya meal are made from Soya flour by extrusion.

### Technology

The processing of soya flour requires the use of modern technology which involves the employment of some skills especially in machinery operation.

### Plant & Machinery:

Plant and Machinery consists of cleaning equipment, SS Tanks, Grinders, Boiler, weighing scale and packaging machine.

Note: Machinery can be locally purchased in Uganda especially from Agro-Sokon – Uganda limited.

### Market Analysis:

The potential markets for soya flour are in the school feeding programme, Social welfare feeding programme, confectionery industries, Baking Industries for Nuggets and Chunks manufacturing as a supplement for wheat flour. Maganjo Industry Uganda Ltd and SESACO (U) have already invested in this Industry.

### Project Costs

Capital Investment Requirements in US\$

Capital Investment Item	Units	Qty	Unit Cost\$	Amount \$
Truck	No.	1	8,000	8,000
Grinder	No.	1	2,500	2,500
Boiler	No.	1	100	100
Gas Cooker	No.	1	500	500
SS Tank	No.	1	50	50
Cleaning Machine	No.	1	500	500
Furniture	No.	5	30	150
Weighing Scale	No.	1	100	100
Packaging Machine	No.	1	1,000	1,000
<b>Total Amount</b>				<b>12,900</b>

### 1. Operating Costs in US\$

Item	Units	Unit Cost	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
<b>Direct Costs</b>						
Soya	Kgs	0.5	1,000	500	13,000	156,000
<b>Sub total</b>				<b>500</b>	<b>13,000</b>	<b>156,000</b>
<b>General Costs (Over heads)</b>						
Rent					500	6,000
Gas					500	6,000
Labour					500	6,000
Utilities (Power & Water)					800	9,600
Repair & Maintenance					500	6,000
Packers					130	1,560
Fuel					500	6,000
Depreciation(Asset write off) Expense					268.7	3,224
<b>Sub - total</b>					<b>3,699</b>	<b>44,384</b>
<b>Total Operating Costs</b>					<b>16,699</b>	<b>200,384</b>

### 3. Project Product Costs & Price Structure in US\$

Item	Qty/day	Qty/yr	Unit Cost	Pdn Cost/yr	Unit price	T/rev
Flour	1000	312,000	0.64	200,384	1	312,000

### 4. Profitability Analysis in US\$

Profitability Item	Per day	Per Month	Per Year
Revenue	1,000	26,000	312,000
Less: Production & Operating Costs	500	16,699	200,384
<b>Profit</b>	<b>500</b>	<b>9,301</b>	<b>111,616</b>

### Source of Supply of Rawmaterials

For the proposed product mix 1 ton per day (30 tons per month) of Soya Beans are required. This will be locally sourced from local Markets.

### Government Facilities and Incentives Available

Government is willing to finance Agro-Processing Industries and provide technical support to them in her bid to promote industrialization.



## BUSINESS IDEA FOR MAKING ACRYLIC SHEETS



### Introduction

Acrylic sheet are used in manufacturing of scales, set square stencils, transparent covers of instruments, neon and fancy lighting signboards, fancy tables, storage boxes, floppy diskette, shelves for audio cassettes and other novelty

items. They have good weather resistance with highly durable optical clarity, high strength-to-weight ratio, good dimensional stability, good thermo-formability, etc. it costs US\$ 103,984 with a capacity 30,000kg annually and estimated revenues are US\$ 111,999 per annum

### Production process

In manufacturing process, a mixture of regenerated and virgin methyl methacrylate monomer is used to effect economy of operation. To obtain the regenerated polymer, the acrylic scrap is heated with certain chemicals to about 400<sup>0</sup>- 450<sup>0</sup> C in a mild steel distillation still placed on a open fire or a furnace and fitted with a condenser and collecting flask. The heating operation results in cracking polymethyl methacrylate into crude methyl methacrylate monomer, which, after vaporizing, gets condensed and is collected in a tank, is redistilled to obtain the pure regenerated monomer. A mixture of the virgin monomer and regenerated monomer is mixed with the desired catalyst of benzyl peroxide and heated. After a desired degree of polymerization, the viscous mass is cooled, mixed with pearl essence colours and poured into moulds. The moulds are filled with pre-polymerization mass and heated; finally they are dipped in a hot water bath to complete the polymerization. On complete polymerization, the sheets are cut into required sizes and covered with paper sheets.

### Market Analysis

The market is flooded with products made of acrylic sheets. With some value addition, the acrylic manufacturing units can generate a lot of demand in urban and rural areas. Some sub-sectors where demand could be tapped are the entertainment industry, information communication technology and outside advertising. This Industry is not yet established in Uganda.

### Capital Investment Requirement in US \$

Item	Units	Qty	Price	Total
Acrylic scrap depolmerization unit	No	1	1,750	1,750
SS distillation still	No	2	1,250	2,500
Coal fired boiler	No	2	2,500	5,000
Water storage tanks	No	2	350	700
Glass sheet moulds	No	1	1,500	1,500
Acrylic sheet cutter machine	No	1	750	750
Water circulation pumps	No	4	500	2,000
<b>Total cost of Machinery &amp; Tools</b>				<b>14,200</b>

1. Production costs assume 312 days per year with daily capacity of 96.2 Sheets.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 days
5. Currency used is US Dollars.

### Production and Operating costs in US \$

### (a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost /day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
Acrylic scrap	kgs	50	3.21	160.26	4166.7	50,000
Methyl methacrylate monomer	ltrs	50	0.16	8.01	208.3	2,500
Benzyl peroxide	ltrs	30	0.10	2.88	75.0	900
calcium chloride	kgs	25	0.96	24.04	625.0	7,500
Pearl essence & Colour	ltrs	6	0.22	1.3	35	420
Caustic soda	ltrs	11.5	0.13	1.5	38	460
Stearic acid	ltrs	75	0.31	23.3	605	7,254
Packaging material	pkts	2	3.21	6.4	167	2,000
<b>Sub-total</b>				<b>228</b>	<b>5,919.5</b>	<b>71,034</b>
<b>General Costs (Overheads)</b>						
Labour					1,200	14,400
Selling & distribution					100	1,200
Utilities (Water, power)					500	6,000
Administration					100	1,200
Rent					400	4,800
Miscellaneous expenses					150	1,800
Depreciation					296	3,550
<b>Sub-total</b>					<b>2,746</b>	<b>32,950</b>
<b>Total Operating Costs</b>					<b>8,665.3</b>	<b>103,984</b>

### Project product costs and Price Structure in US \$

Item	Qty/ day	Qty/ yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Acrylic Sheets	96.2	30,000	3.47	103,984	4	111,999

### Profitability Analysis in US \$

Profitability Item	Per day	Per month	Per year
Revenue	385	10,000	111,999
Less: Production and operating costs	333	8,665	103,984
<b>Profit</b>	<b>51</b>	<b>1,335</b>	<b>16,015</b>

### Source of Supply of Rawmaterials

Rawmaterials can be imported from China and India.

### Government incentive:

Startup costs 25% granted on actual cost over the first four years in four equal installments. Initial allowance granted in the first year of production 75% granted on the cost base of plant and machinery for industries located elsewhere in the country.

## BUSINESS IDEA FOR MAKING ALUMINIUM POWDER



### Introduction

Aluminium powder is a fine granular powder made from aluminium which has several applications and is used in the manufacturing of slurry explosives, detonators for specialized applications such as rails, crackers, sparkles and other pyrotechnic products. The envisaged project is for setting up

of a plant to make this powder. The project cost is US \$ 29,563 with production capacity of 300,000 kgs per annum collecting estimated revenues US \$ 44,998 per year.

### Production Process

Aluminium metal is melted in a furnace with the temperature maintained around 720<sup>0</sup>-760<sup>0</sup>C. By inducing an air jet in the molten aluminium, small particles of atomized aluminium are produced. A jet of hot air under pressure is passed through annular opening, near the top, drawn by suction through orifice. This leads to the formation of small particles of aluminium. These particles are drawn by suction, through a collecting duct placed above the nozzle, and finally get into a cyclone collecting system. The process of sieving segregates different sizes of aluminium powder. The envisaged plant would have a minimum plant capacity of 300 tonnes per annum. This is on the basis of 300 working days and single 8-hour daily work shifts.

### Market Analysis

Production of aluminium powders of various grades and products, such as aluminium paste is not well established in the country. The aluminium powder industry is still of a relatively small size. With the introduction of a plant to make military hardware, the market for aluminium powder is bound to increase. The major key players include; Roofings Uganda Limited, TEMBO (U) Ltd, Deals Uganda Ltd, Alcoh (U) Ltd, among others.

### Capital Investment Requirement in US \$

Item	Units	Qty	Price	Total cost
oil fired furnace	No	1	1,750	1,750
Ball mill	No	1	500	500
Thermo compressor	No	1	600	600
Hot air chamber	No	1	700	700
Powder collecting duct complete section	No	1	1,250	1,250
Water cooling pump	No	1	750	750
<b>Total cost of tools &amp; Equipment</b>				<b>5550</b>

### Production and Operating costs in US \$

#### (a) Direct material, supplies and cost

Cost Item	Units	Unit Cost	Qty/day	Pdn cost/day	Pdn cost/mth	Pdn cost/yr
<b>Direct Costs</b>						
Aluminium metal	kgs	0.125	32.05	4.0	104	1,250
Mineral spirit	ltrs	52.5	0.10	5.0	131	1,575
Coating material	kgs	7	1.60	11.2	292	3,500
Packaging material	ltrs	0.5	1.60	0.8	21	250
<b>Sub-total</b>				<b>21</b>	<b>547.92</b>	<b>6,575</b>
<b>General Costs (Overheads)</b>						
Labour					350	4,200

Selling & distribution	200	2,400
Utilities (Water, power)	500	6,000
Administration	250	3,000
Rent	400	4,800
Miscellaneous expenses	100	1,200
Depreciation	116	1,388
<b>Sub-total</b>	<b>1,916</b>	<b>22,988</b>
<b>Total Operating Costs</b>	<b>2,464</b>	<b>29,563</b>

1. Production costs assumed are for 312 days per year with daily capacity of 961 kgs

2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.

3. Direct costs include: materials, supplies and other costs directly incurred to produce the product.

4. Currency used is US Dollars.

### Project product cost and Price Structure in US \$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Aluminium Powder	961.500	299,988	0.10	29,563	0.15	<b>44,998</b>

### Profitability Analysis in US \$

Profitability Item	Per day	Per month	Per year
Revenue	144	3,750	44,998
Less: Production and operating costs	95	2,464	29,563
<b>Profit</b>	<b>49</b>	<b>1,286</b>	<b>15,436</b>

### Source of Supply of Rawmaterials

Aluminium is imported from Japan and Dubai which is further processed in Powder form.

### Government incentive:

Startup costs 25% granted on actual cost over the first four years in four equal installments. Initial allowance granted in the first year of production while 75% granted on the cost base of plant and machinery for industries located elsewhere in the country.

## BUSINESS IDEA FOR MAKING BANANA FABRIC POLYMER

### Introduction

A cost-effective substitute for glass fibre, banana fibre polymer composite can be a very good fibre-reinforced plastic to make a variety of products. Products such as trays, mirror-casings, voltage stabilizer covers and electrical panels are now made from this material. The envisaged project is therefore to set up a plant for making banana fabric polymer. The project cost is US\$ 56,972 with a capacity of 10,000kg per annum yielding estimated revenue of US\$ 61,998 per year.

### Production Process, capacity and technology

The process starts with preparing moulds of metal, wood or plaster of Paris, followed by mixing of resin with dye in requisite proportion, shaping the banana fabric by placing it on the mould and reinforcing the polymer over banana fabric. Later these are cured, de-moulded and cut. Finally these are trimmed and polished for market. The proposed plant would have a minimum capacity of 10 tonnes per annum on the basis of 312 working days.

### Market Analysis

The cost effective nature of this product has made it a perfect substitute for glass fibre. Today, the demand for banana fabric polymer is gaining ground as a variety of products can be made from this, with a potential market growth. Therefore most of the manufacturing industries should be targeted so as to tap forward and backward linkages as the fibre is normally used in the manufacture of other products. In Uganda, this Industry is not yet established.

### Capital Investment Requirement in US \$

Item	Units	Qty	Price	Total
Moulds	No	5	500	2,500
Weighing balance	No	2	25	50
Other tools & equipment	No	1	750	750
Mixing Machine	No	1	500	500
<b>Total cost of Machinery &amp; Tools</b>				<b>3,800</b>

### Production and Operation costs in US \$

#### (a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost/day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
Banana Fibre	kgs	2	32.5	64.10	1,666.7	20,000

Cotton fabric	mtrs	3	16.03	48.08	1,250.0	15,000
Polyester resin	mtrs	1.5	9.62	14.42	375.0	4,500
Catalyst,dyes, pigments	ltrs	6	0.22	1.3	35	420
Mould release agent	ltrs	1.5	1.50	2.3	59	702
Packaging material	pkts	2	6.41	12.8	333	4,000
<b>Sub-total</b>				<b>143</b>	<b>3,718.5</b>	<b>44,622</b>
<b>General Costs (Overheads)</b>						
Labour					300	3,600
Selling & distribution					100	1,200
Utilities (Water, power)					200	2,400
Administration					100	1,200
Rent					150	1,800
Miscellaneous expenses					100	1,200
Depreciation					79	950
<b>Sub-total</b>				<b>1,029</b>	<b>12,350</b>	
<b>Total Operating Costs</b>				<b>4,747.5</b>	<b>56,972</b>	

1. Production costs assume 312 days per year with daily capacity of 32.1 Kgs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

### Project product costs and Price structure in US \$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Banana Fabric Polymer	32.1	10,000	5.70	56,972	6.20	61,998

### Profitability Analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	199	5,166	61,998
Less: Production and operating costs	183	4,748	56,972
<b>Profit</b>	<b>16</b>	<b>419</b>	<b>5,026</b>

### Source of Supply of Rawmaterials

Banana Fibres are readily available in Uganda.

### Government Incentives:

The Government supports Potential Investors in form of grants such as; Startup costs 25% granted on actual cost over the first four years in four equal installments. Initial allowance granted in the first year of production 75% granted on the cost base of plant and machinery for industries located elsewhere in the country

## BUSINESS IDEA FOR MAKING BANANA FIBER PRODUCTS



### Introduction

The banana fiber is a widely used product in making coarse woven fabrics e.g. sacks, ropes, twigs, sand bags, tents, webbings, canvas and screens, kit bags, tool bags, luggage, gunny bags and covers. The fiber is extracted from the pseudo-stem of banana. Banana fiber can also be blended with wool and cotton for making blankets, carpets etc. The proposed project is for setting up a banana fiber making plant to utilize the products of the variety of banana plantations in Uganda. The project cost is US\$ 34,312 with capacity of 46,800kgs per year, revenue estimates stand at US\$ 93,600 annually.

### Production Process

The production process starts with the extraction of the fiber from banana pseudo-stem. The process involves splitting of the banana pseudo-stem into strips, injection in open vats followed by washing and drying. By using traditional techniques, the fiber can be converted into various utility items. Production capacity is projected at 150kgs per day.

### Market Analysis

A wide range of products can be produced which enjoy good market in both rural and urban areas. It's a potential boost to the tourism sector and economy as a whole since many tourists like these products. These products are mainly made from Art and Craft Centres, Recreation Centres and Tourist Camps.

### Capital Investment Requirement in US \$:

Item	Units	Quantity	Cost	Total
Two roll crusher	Numbers	1	3,500	3,500
Drying chambers	Numbers	1	2,500	2,500
Weighing balance	Numbers	1	25	25
Cutting and splitting equipment	Numbers	2	30	60
Open vat		1	1,750	1,750
<b>Total cost of Machinery &amp; Tools</b>				<b>7,835</b>

1. Production costs assume 312 days per year with daily capacity of 150 Kgs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

### Production and Operating costs in US \$

#### (a) Direct material, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost/ day	Pdn cost /mth	Pdn cost /yr
<b>Direct Cost</b>						
Banana pseudo stem	Kgms	0.0250	321	8.01	208.33	2,499.90

Chemical	Litres	5	0.64	3.20	83.20	998.40
Paper / Plastic roll stems	Rolls	2	3	4.50	117.00	1,404.00
Polythene bags/ sacks	packets	0.4	3.20	1.33	34.65	415.83
Other materials		-	-	-	10.00	120.00
<b>Sub-total</b>		-	-	<b>17</b>	<b>453.18</b>	<b>5,438.13</b>
<b>General Costs (Overheads)</b>						
Labour					625	7,500
Selling & distribution					150	1,800
Utilities					250	3,000
Rent					350	4,200
Administration expenses					65	780
Miscellaneous expenses					150	1,800
Depreciation					163	1,959
<b>Sub-total</b>					<b>1,753</b>	<b>21,039</b>
<b>Total Operating Costs</b>					<b>2,206.18</b>	<b>26,476.83</b>

### Project product costs and Price structure inUS \$

Item	Qty/day	Qty/yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Banana Fiber	150	46,800	0.6	26,477	2	<b>93,600</b>

### Profitability Analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	300	7,800	93,600
Less: Production and operating costs	39	1,018	26,477
<b>Profit</b>	<b>261</b>	<b>6,782</b>	<b>67,123</b>

### Sources of Supply of Rawmaterials

Banana Fibres are readily available in Uganda.

### Government Incentives

The Government of Uganda has promoted the development of the tourist sector through tax exemptions.

## BUSINESS IDEA FOR MAKING BANANA WAFERS



### Introduction:

Banana Wafers are a popular snack eaten world over. Banana wafers are made by cutting bananas into thin slices. This project uses the bananas commonly known as Matooke in Uganda and is readily available. Wafers can simply be eaten directly or as desserts and puddings so can capture a wide market. It's a cross cutting venture as it can be undertaken in both rural and urban settings. The project cost is US\$ 18,484 producing 46,800kgs per annum bringing estimated revenue of US\$ 35,100 per year.

### Production process, Capacity and Technology:

The Bananas can be peeled manually or using a peeling machine. They are then sliced and rapidly dehydrated to reduce the moisture content and then deep fried in the cooking oil. Excess oil is extracted and the fried banana wafers are seasoned with salt and other spices as may be deemed necessary. The plant capacity is 150kg per 8 hours but there are equipments with bigger capacity. The technology involved can be locally accessed within Uganda and therefore this makes it affordable.

### Equipment and Machinery:

The machinery and equipment to be used in this project can be procured locally or imported.

### Market Analysis

Banana wafers are common among the urban population. With an increased shelf life, the wafers can be supplied to supermarkets, schools, hotels, hospitals, and with aggressive marketing can capture a lot of consumer attention. They can also be produced in different styles or designs like macarons. They can also be exported. However, this industry is not well established as production is mainly operated on small scale.

### Capital Investment Requirement in US \$:

Item	Units	Qty	Price	Total
Peeling machine	No	1	500	500
Slicing machine	No	1	250	250
Deep fat frying pans.	No	1	150	150
Impulse sealer	No	2	30	60
Salt mixing drum	No	1	125	125
Weighing balance	No	1	25	25
Oil extraction machine	No	1	125	125
<b>Total cost of Machinery &amp; Tools</b>				<b>1,235</b>

1. Production costs assume 312 days per year with daily capacity of 150 Kgs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

### Production and Operating Costs in US \$

### (a) Direct materials supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost /day	Pdn Cost /mth	Pdn Cost /yr
<b>Direct Costs</b>						
Bananas	Kgms	0.00	3	150	0.40	124.02
Cooking oil	Ltres	2	10	20.	520.	6,240.
Spices & Flavour	Kgms	4	1	4.00	104.00	1,248.
Polythene bags	packet s	1	0.01	0.01	0.26	3.12
<b>Sub-total</b>				<b>24</b>	<b>634.60</b>	<b>7,615.14</b>
<b>General Costs (Overheads)</b>						
Labour					260	3,120
Selling & distribution					100	1,200
Utilities					250	3,000
Rent					120	1,440
Miscellaneous expenses					150	1,800
Depreciation					1	309
<b>Sub-total</b>					<b>881</b>	<b>10,869</b>
<b>Total Operating Costs</b>					<b>1,515.5</b>	<b>18,483.8</b>

### Project Product cost and Price Structure in US \$

Item	Qty/ day	Qty/ yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Wafers	150	46,800	0.4	18,484	0.75	35,100

### Profitability Analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	113	2,925	35,100
Less: Production and operating costs	59	1,540	18,484
<b>Profit</b>	<b>54</b>	<b>1,385</b>	<b>16,616</b>

### Source of Supply of Raw Materials:

Bananas are readily available in the local markets spread all over the Country.

### Government Incentives available:

The Government has taken the initiative to support the development of Agro-processing Industry through Tax Holidays, Exemptions and Land allocation to potential Investors.

## BUSINESS IDEA FOR MAKING BLEACHED DRY GINGER



### Introduction

Ginger is a commonly grown culinary item. The envisaged project is to set up a plant to plant & to preserve ginger by bleach-drying. The ginger is bleached, left to dry and dehydrated for preservation. Preserved ginger

has a big market over an extended period. Used in instant masalas, dried ginger is a sort of a ready mix for all food preparations. In the pharmaceutical industry, ginger is used for extracting oleoresins. Ginger is widely grown in Uganda and thus this project need not be put in the urban areas alone. The project can be put up in the rural areas where most of the ginger is grown. It costs US\$ 52,806 capacity of 62,400kg per year and revenue estimate US \$62,400 annually.

### Production process, capacity and Technology

Fresh ginger is cleaned thoroughly to remove soil and dirt. The outer skin is peeled with the help of a stainless steel knife. The ginger is then washed and soaked in limewater for 12 hours after which it is dried. This process is repeated two or three times to get dried moisture level of 10-12 %. The product is then packed in polythene lined gunny bags. The envisaged plant has a minimum capacity of 200kg per day. The output can later on be increased but the only issue is the sustainability of the supply of the ginger.

### Market Analysis

Dried ginger has a market as a culinary item in almost all over the world. The market for instant masalas has been growing for some time and supply to restaurants, supermarket chains, etc. Aggressive advertising is needed though there is competition comes from imported products. This industry is not well developed in Uganda as there are very few players, such as; SESACO.

### Capital Investment Requirement in US\$

Item	Unit	Qty	Price	Total
Ginger peeling machine	No	1	1125	1125
Electrically operated tray drier	No	1	1500	1500
Weighing Scale, sealing machine	No	1	55	55
Washing tank	No	2	75	150
Racks, Knives, cutters,	No	1	27.5	27.5
Packing tables/ plastic tubes	No	1	125	125
Total cost of tools & Equipment				<b>2982.5</b>

1. Production costs assumed are for 312 days per year with daily capacity of 200 Kgs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include materials, supplies and other costs directly incurred to produce the product.
4. Currency used is US Dollars

### Production and Operation costs in US \$

(a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty/day	Pdn cost/day	Pdn cost/mth	Pdn cost/yr
<b>Direct Costs</b>						
Fresh Ginger	kgs	1.25	64.10	80.13	2083.3	25,000
Lime / salty water	ltrs	6	0.32	1.9	50	600
Polythene lined bags	pkts	7.5	6.41	48.1	1250	15,000
<b>Sub-total</b>				<b>130</b>	<b>3,383.33</b>	<b>40,600</b>
<b>General Costs (Overheads)</b>						
Labour					455	5,460
Selling & distribution					200	2,400
Utilities (Water, power)					50	600
Administration					50	600
Rent					100	1,200
Miscellaneous expenses					100	1,200
Depreciation					62	746
<b>Sub-total</b>					<b>1,017</b>	<b>12,206</b>
<b>Total Operating Costs</b>					<b>4,400.46</b>	<b>52,806</b>

### Project product costs and Price Structure in US \$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Bleached dry ginger	200.0	62,400	0.85	52,806	1	62,400

### Profitability Analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	200	5,200	62,400
Less: Production and operating costs	169	4,400	52,806
<b>Profit</b>	<b>31</b>	<b>800</b>	<b>9,594</b>

### Sources of machinery and materials

While the equipment can be sourced from China and India, they can be fabricated in Uganda by Tree Shade Ltd, Mwanga II Rd-Kisenyi Kampala, and John Lugendo &Co Ltd, Ndeeba Masaka Rd, email [lugendojohn07@yahoo.com](mailto:lugendojohn07@yahoo.com). Ginger is locally grown in central Uganda mainly and all over the country.

### Government Incentive

In a bid to promote Agric Modernisation and Agro-processing, the Government of Uganda has waved off taxes on Agro-processing Industries.

## BUSINESS IDEA FOR MAKING BRASS & BRONZE ITEMS CASTINGS



### Introduction

Brass is an alloy of copper and zinc and the proportion of copper and zinc vary in this alloy depending upon requirements of the end product. Copper alloy with tin is known as gun metal or tin bronze. This has wide application in engineering, marine and automobile industry. Copper alloy with aluminium is known as aluminium bronze. It is also extensively used in manufacturing of decorative items for our daily use. It costs US\$ 36,035 with a capacity of 15,000kg yielding estimated revenue of US \$ 44,994 per year.

### Production Process, capacity and technology

The process of casting involves melting of the desired composition, preparation of mould cavity of sand, pouring the molten metal into mould cavity, knocking the mould after solidification and cooling of the castings, fitting and cleaning. The envisaged plant has a minimum m plant capacity of 15,000kg per annum but output can be increased tremendously when a grip on the market has been made.

### Market Analysis

Brass and bronze items have very good market potential. The demand for use of brass and bronze art ware for decoration purposes in houses and offices has increased considerably. With increased industrialization in Uganda and an improvement in the quality of living, demand for the castings is bound to go up. Roofings (U) Ltd, Steel Rolling Mill (U) Ltd are the major key players in this sector.

### Capital investment Requirement in US \$

Item	Units	Qty	Price	Total
Oil fired tilting furnace	No	1	1,750	1,750
Weighing balance	No	2	25	50
ladle & tongs	No	2	15	30
Hand moulding equipment	No	1	1,500	1,500
Bench grinder	No	1	750	750
Mixing Machine	No	1	500	500
<b>Total cost of Machinery &amp; Tools</b>				<b>4,580</b>

1. Production costs assume 312 days per year with daily capacity of 48.1 Kgs.

2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.

3. Direct costs include materials, supplies and all other costs incurred to produce the product.

4. A production month is 26 days

5. Currency used is US Dollars.

### Production and Operation costs in US \$

(a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost /day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
Copper & Zinc	kgs	1	32.1	32.1	833.3	10,000
Mould release agent	ltrs	6	0.16	1.0	25	300
Other reagents	ltrs	1.25	1.00	1.3	33	390

Packaging material	pkts	2	3.21	6.4	167	2,000
<b>Sub-total</b>				<b>41</b>	<b>1,057.5</b>	<b>12,690</b>
<b>General Costs (Overheads)</b>						
Labour					1,200	14,400
Selling & distribution					200	2,400
Utilities (Water, power)					200	2,400
Administration					50	600
Rent					100	1,200
Miscellaneous expenses					100	1,200
Depreciation					95	1,145
<b>Sub-total</b>					<b>1,945</b>	<b>23,345</b>
<b>Total Operating Costs</b>					<b>3002.9</b>	<b>36,035</b>

### Project product costs and Price structure in US \$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Brass & Bronze casting	48.1	14,998	2.40	36,035	3	44,994

### Profitability Analysis in US \$

Profitability Item	Per day	Per month	Per year
Revenue	144	3,749	44,994
Less: Production and operating costs	115	3,003	36,035
<b>Profit</b>	<b>29</b>	<b>747</b>	<b>8,959</b>

### Source of Equipment and Raw materials

Can be locally fabricated in Uganda by Tonet Ltd kanyanya Gayaza Rd or imported and raw materials can easily be mobilized locally or even imported.

### Government Incentive

The Government of Uganda through Uganda Investment Authority grants a 25% on the actual cost over the first four years in four equal installments.

## BUSINESS IDEA FOR MAKING CLAY PIPES



### Introduction:

Clay has been used as a sewer pipe material for the last 4,000 years. The clay pipe industry was one of the earliest industry and today verified clay pipe is the most durable sewer product available, with long life, environmentally friendly, inert resistant to chemicals. Clay pipe is enjoying renewed interest among Civil Engineers and in municipalities that have an environmentally preferable purchasing policy and desire to incorporate sustainable practice. Clay pipes are used in laying drainage lines. These pipes have the special advantage of water absorption over other pipes and are produced in different shapes and sizes. The pipes are used in almost every building and construction, especially with the increased efficiency needs about sewerage disposal. The Revenue potential is estimated at US \$43,290 per annum and production capacity of 23,400 from total investment of US\$ 16,530.

### Production Process, Capacity and technology

A manually operated clay pipe-making machine has been developed to enable easy use by semi- skilled potters in both urban and rural areas. These pipes are extruded from a mixture of lean and plastic clay of varying composition and fired at optimum firing temperature of 900- 950 degrees centigrade. The pipes are cooled and packed for the market. The proposed plant would have a minimum capacity of 75 pieces of pipes per day. This is on the basis of single daily 8-hour work shifts.

### Market Analysis

Clay pipes are extensively used in the construction of drainage systems and have good market potential both in rural and urban areas. With the increase in the rate of constructions/buildings being put up, these pipes would find a ready market although they would face competition from some other local producers. In this Industry, Uganda Clays, Master Industries, Lweza Clays are the major investors in this sector.

### Capital Investment Requirement in US \$

Item	Units	Qty	Price	Total
Vertical clay pipe making machine	No	1	500	500
Firing Kiln	No	1	2500	2500
<b>Total cost of tools</b>				<b>3000</b>

1. Production costs assume 312 days per year with daily capacity of 75Pecies.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

### Production and Operation Costs in US\$

(a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost/ day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
Plastic clay	Kgms	0.13	75	9.62	249.99	2,999.88
Fuel	Litres	1	20	23	598.	7,176.
<b>Sub-total</b>	-			<b>33</b>	<b>847.99</b>	<b>10,175.88</b>
<b>General Costs (Overheads)</b>						
Labour					640	7,680
Selling & distribution					100	1,200

Utilities (Water, power)	500	6,000
Rent	50	600
Miscellaneous expenses	25	300
Depreciation	2	750
<b>Sub Total</b>	<b>1,317</b>	<b>16,530</b>
<b>Total Operation</b>	<b>2,165.</b>	<b>26,706</b>

### Project Product costs and Price structures in US \$

Item	Qty/day	Qty/yr	Unit Cost	Pdn cost/yr(\$)	Unit price	Total rev(\$)
Clay pipes	75	23,400	1.1	26,706	1.85	43,290

### Profitability Analysis in US \$

Profitability Item	Per day	Per month	Per year
Revenue	139	3,608	43,290
Less: Production and operating costs	24	636	16,530
<b>Profit</b>	<b>114</b>	<b>2,972</b>	<b>26,760</b>

### Source of Supply of Rawmaterials

Clay can be got from all over the country from Clay Mining Areas/Sites.

### Government Incentive

The Government has subsidized the Building and Construction Industry through Tax exemptions and Allowances. Also, a Start up costs 25% granted on actual cost over the first four years in four equal installments.



# BUSINESS IDEA FOR MAKING COLOURED WAX CRAYONS



## Introduction

Used as educational aid for drawings and sketches, coloured wax crayons are in great demand now, especially with current policy reforms in the education sector. They are normally used by children and artists, although they can be used by professionals, especially in business presentations, etc. A plant for making coloured wax crayons can be set up anywhere and does not require much in terms of expertise. This makes the project suitable for both rural and urban folks and will cost US\$28,866 with capacity of 60,000 boxes annually, estimated revenues US\$ 60,001 per year.

## Production Process, capacity and Technology

The process consists of melting wax with the appropriate dye/pigment. Filler is added to the melted wax and cast in required shapes and sizes. Finally, the crayons are wrapped and packed in cardboard boxes. The envisaged plant would have a minimum capacity of 192.3 boxes (1 gross per box) per day. This is on the basis of 312 working days in a year and single 8-hour daily work shifts.

## Market Analysis

With the growing education base both in urban and rural areas, the use of coloured wax crayons have shot up in the last few years. Therefore, there is ready market and for this, educational institutions including nurseries, vocational colleges like Art academies, should be targeted. Supply should also be made to bookshops and other stationery shops. Picfare and Oscar Industries are the major players in this sector.

## Capital Investment Requirement in US \$

Item	Units	Qty	Price	Total
Mixer	No	1	1,000	1,000
Packing & Sealing machine	No	2	3.75	7.5
Mould	No	2	75	150
Boilers/ Melting machine	No	2	500	1,000
Compressor /cooler	No	1	275	275
<b>Total cost of tools &amp; Equipment</b>				<b>2432.5</b>

1. Production costs assumed are for 312 days per year with daily capacity of 192.3 boxes.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and other costs directly incurred to produce the product.
4. Currency used is US Dollars

## Production and Operating costs in US\$

### (a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost /day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
Paraffin,	ltrs	1.25	0.48	0.60	15.6	187.5
Wax	kgs	2.5	16.03	40.1	1042	12,500
Dyes	pkts/kgs	3	0.10	0.3	8	90
Packaging material	pkts/kgs	1	9.62	9.6	250	3,000

<b>Sub-total</b>	<b>51</b>	<b>1,314.79</b>	<b>15,778</b>
<b>General Costs (Overheads)</b>			
Labour	390	4,680	
Selling & distribution	200	2,400	
Utilities (Water, power)	150	1,800	
Administration	50	600	
Rent	150	1,800	
Miscellaneous expenses	100	1,200	
Depreciation	51	608	
<b>Sub-total</b>	<b>1,091</b>	<b>13,088</b>	
<b>Total Operating Costs</b>	<b>2,405.46</b>	<b>28,866</b>	

## Project product cost and Price Structure in US\$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Crayons	192.3	60,001	0.48	28,866	1	<b>60,001</b>

## Profitability Analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	192	5,000	60,001
Less: Production and operating costs	93	2,405	28,866
<b>Profit</b>	<b>100</b>	<b>2,595</b>	<b>31,135</b>

## Source of machinery and raw materials:

Wax can be imported from Thailand, Liberia and China.

## Government Incentive:

The Government has subsidized this Industry through Duty Draw-back on Inputs Imported.

## BUSINESS IDEA FOR COMPOUND DESIGNING



### Introduction

Compound designing is an upcoming lucrative business in this era. Many developers are now interested in having well designed compounds that are be- fitting to their modern homesteads. This can be done for Universities, homes, Schools recreation centers, hospitals, camping sites, estates, hotels etc. and it is on very big demand and is highly marketable. Project cost is US\$ **17,826** collecting revenue of US\$25,584 annually form 312 compounds done per year.

### Processes, Capacity and Technologies

The process starts as the premises near completion or when civil works are in the final stages. Leveling of the compound commences, black soil is mixed with composite and planting of grass, flower, trees, hedges etc. follows. Pavements, pavers and any arches are all put in place. Constant irrigation or watering is done to speed up growth. The placing of lights are identified and if procured are fixed.

### Market Analysis

Compound designing is a new development that has come up with modernization that is sweeping society. The market potential includes: the affluent, Institutions and recreation centers among others. This is a lucrative business venture. There are numerous compound designers spread across the country.

### Capital Investment Requirement in US \$

Item	Units	Qty	Cost	Total
Cutters/ mowers	No	5	1,125	5,625
slashes	No	5	3	13
Hoes ,level, dustbin, rake Spade	No	1	126	126
Motor bikes	No	2	1,000	2,000
scissor	No	5	13	63
Horse pipes	No	5	38	188
carrier basin	No	5	2	8
tape measures	No	5	8	38
watering cans	No	5	18	88
wheelbarrow	No	5	90	450
<b>Total cost of Machinery &amp; Tools</b>				<b>8,596</b>

1. Production costs assumed are for 312 days per year with daily capacity of 1 compound.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include materials, supplies and all other costs that directly go into production of a product.
4. A production month is assumed to have 26 work days.
5. Currency used is US Dollars.

### Production and Operating costs in US\$

(a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost /day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
String (blade)	Meter	1.429	3	4.29	111.42	1,337.08
Fuel	Litres	1	20	25	650.00	7,800.00
<b>Sub-total</b>				<b>29</b>	<b>761.42</b>	<b>9,137.08</b>
<b>General Costs (Overheads)</b>						
Labour					325	3,900
Selling & distribution					150	1,800
Utilities (Water, power)					10	120
Rent					35	420
Miscellaneous expenses					25	300
Depreciation					179	2,149
<b>Sub-total</b>					<b>724</b>	<b>8,689</b>
<b>Total Operating Costs</b>					<b>1,485</b>	<b>17,826</b>

### Project service costs and Price structure in US \$

Service	Comps Design /day	Design comp /yr	Comp design cost	Comp Design cost/yr	Comp design price	Total /rev
Compound designing	1	312	57.1	17,826	82	25,584

### Profitability Analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	82	2,132	25,584
Less: Production and operating costs	26	686	17,826
<b>Profit</b>	<b>56</b>	<b>1,446</b>	<b>7,758</b>

### Source of Supply of Rawmaterials & Equipment

The equipment and materials can all be sourced locally and at relatively cheaper rates. Tonet Ltd, Kanyanya Gayaza Rd, John lugendo & co Ltd

### Government Incentives

The Government of Uganda has encouraged and Initiated Compound Designing Course in the Educational Curriculum.

## BUSINESS IDEA FOR MAKING DETERGENT – LAUNDRY SOAP

### Introduction

Soaps are salts of the fatty acid or mixtures of such salts. There are two kinds of soaps, water-soluble and water insoluble. Soaps are prepared both by neutralizing the preformed fatty acids with alkali or by a direct mixture of fats and treating with an alkali. Laundry soap is the most popular surfactant that finds application in the household sector as well as in the industrial sector. Project costs are US\$103,703 with capacity of 100,000 boxes of soap per annum. This yields estimated revenue of US\$ 150,000 per annum. Setting up a plant to start making laundry soap is a viable project and can be put up in both rural and urban areas since it has a substantial market in both areas.

### Production Process

Reacting natural oils or animal fats with sodium hydroxide or other strong alkali are used in making detergent soap. After melting, the natural fats are pumped into kettles and are heated with an open steam coil. Later, 10%-15% caustic solution is added. The mixture is further heated by steam until 95% saponification takes place. Salt mass is added and boiled with water or steam to make sodium silicate carbonate (not more than 0.5%) colouring matter. After thorough mixing, the soap is run through the cooling frames. The cooled soap in the form of blocks is cut by machine into slabs and then bars and stamped. The profiled plant has a minimum capacity of 100 tonnes per annum.

### Market Analysis

The marketability of laundry soap does not pose any problem, provided it is a quality product and is not hazardous to the human skin. It's a widely used product in households and industrial sector. However, due to the varieties on the market, aggressive advertising has to be done. The major key players in this sector includes; Mukwano Group of Industries, BIDCO, RAFIK, among others.

### Capital Investment Requirement in US\$

Item	Units	Qty	Price	Total cost
Soap Kettle	No	1	750	750
Storage tank	No	2	500	1000
Crutcher	No	2	600	1200
C.I Frame &Frame trolley	No	2	700	1400
Baby trolley	No	1	650	650
Circular cutting machine	No	1	750	750
Chipping machine with motor	No	1	1000	1000
Drying racks and trays	No	2	750	1500
Miscellaneous Equipment	No	1	750	750
<b>Total cost of tools &amp; Equipment</b>				<b>4000</b>

1. Production costs assumed are for 312 days per year with daily capacity of 321boxes.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs that directly go into production of a product.
4. A production month is assumed to have 26 work days.
5. Currency used is US Dollars.

### Production and Operation costs in US\$

(a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost /day	Pdn cost/ mth	Pdn cost/ yr
<b>Direct Costs</b>						
Fatty acids	Kgms	0.128	75	9.62	249.99	2,999.88
Caustic soda	Ltres	1	20	23.00	598.00	7,176.00
Packing materials	pkts	0.4	16	6.40	166.40	1,996.80
Sodium silicate	litres	15	16	240.4	6250	75000
<b>Sub-total</b>				<b>279</b>	<b>72,64.4</b>	<b>87,173</b>
<b>General Costs (Overheads)</b>						
Labour					640	7,680
Selling & distribution					100	1,200
Utilities (Water, power)					500	6,000
Rent					50	600
Miscellaneous expenses					25	300
Depreciation					2	750
<b>Sub-total</b>					<b>1,317</b>	<b>16,530</b>
<b>Total Operating Costs</b>					<b>8,582</b>	<b>103,703</b>

### Project product costs and Price structure in US\$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Soap	321	100,000	1.0	103,703	1.5	150,000

### Profitability Analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	483	12,500	150,000
Less: Production and operating costs	153	3,989	103,703
<b>Profit</b>	<b>327</b>	<b>8,511</b>	<b>46,297</b>

### Source of Supply of Equipment and Rawmaterials

Rawmaterials are readily available in the Chemical shops spread across the Country. However, the major Equipments are imported from China and India.

### Government Intervention

Government grants startup costs of 25% on actual Investment Costs over the first four years in four equal installments. Initial allowance granted in the first year of production 75% granted on the cost base of plant and machinery for industries located elsewhere in the country.

## BUSINESS IDEA FOR MAKING DISINFECTANT FLUIDS



### Introduction

A disinfectant is basically an agent, which destroys pathogenic organisms. A good disinfectant should also be a deodorant possessing good shelf qualities and it should be effective against a host of microorganisms. The project cost is US\$223,144, with production capacity of 50,000kgs per year with

estimated revenue of US\$249,999 annually.

### Production process, capacity and technology

The manufacture of black fluid disinfectants involves saponification of fatty oils. Soft soap is prepared by adding a boiling solution of caustic soda (33 %) to a mixture of fatty oils and molten rosin. The soft soap thus obtained is dissolved in hot water and the creosote and cresol are added. The fluid thus obtained is dark brown or black in colour. To manufacture white fluid disinfectants, casein is dissolved in water and a homogenous solution is made. Borax is added to this casein solution and stirred properly, which is then filtered and the requisite amounts of HBTA and cresol and creosote are added. Subsequently, homogenization is done in shearing colloid mill. The profiled plant has a minimum capacity of 50 tonnes per annum. It is assumed that there are 312 working days in a year.

### Market Analysis

The product has a good market both in rural and urban areas. Thanks to the growing awareness, the people are using disinfectants as a preventive measure. Supply to Hotels, Restaurants, Public and Private Offices, Supermarket Chains, Stores, etc would help in capturing a portion of the market. However, this Industry is not yet developed in Uganda.

### Capital Investment Requirement in US\$

Item	Units	Qty	Price	Total
Cast iron pan	No	1	500	500
Soft soap dissolving vessel	No	1	650	650
Colloid mill	No	1	750	750
Hot water still direct fired	No	1	150	150
Casein solution tank	No	1	1,000	1,000
HBTA creosote mixing tank	No	1	500	500
Other tools & equipment	No	1	1,500	1,500
<b>Total cost of Machinery &amp; Tools</b>				<b>5,050</b>

1. Production costs assume 312 days per year with daily capacity of 160.3Ltrs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 days
5. Currency used is US Dollars.

### Production and Operating costs in US\$

(a) Direct materials, supplies and costs.

Cost Item	Units	Unit Cost	Qty /day	Pdn cost/day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
High boiling tar acid	ltrs/kgs	22	25.64	564.10	14666.7	176,000
Cresol, creosote	ltrs	6	3.21	19.23	500.0	6,000
Casein & Borax	ltrs	7.5	1.60	12.02	312.5	3,750
Sodium benzene	ltrs	12.5	1.60	20.03	520.8	6,250
W.W. Rosin	ltrs	7.5	0.15	1.13	29.3	351
Castor oil & soya bean oil	ltrs/kgs	10	0.25	2.50	65.0	780
Caustic soda	ltrs	11.5	0.32	3.69	95.8	1,150
Packing material	kgs/pkts	0.15	64.10	9.62	250.0	3,000
<b>Sub-total</b>				<b>632</b>	<b>16,440.08</b>	<b>197,281</b>
<b>General Costs (Overheads)</b>						
Labour					350	4,200
Selling & distribution					300	3,600
Utilities (Water, power)					600	7,200
Administration					150	1,800
Rent					500	6,000
Miscellaneous expenses					150	1,800
Depreciation					105	1,263
<b>Sub-total</b>					<b>2,155</b>	<b>25,863</b>
<b>Total Operating Costs</b>					<b>18,595.28</b>	<b>223,144</b>

### Project product costs and Price structure in US\$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Disinfectant Fluids	160.3	50,000	4.46	223,144	5	249,999

### Profitability Analysis in US

Profitability Item	Per day	Per month	Per year
Revenue	801	20,833	249,999
Less: Production and operating costs	715	18,595	223,144
<b>Profit</b>	<b>86</b>	<b>2,238</b>	<b>26,856</b>

### Source of Supply of Equipment and Rawmaterials

The Rawmaterials and Equipment used in the production process will mainly be imported from India & China.

### Government Incentives

The Government of Uganda has promoted the growth of the Health sector through tax exemptions on Health promoting Industry in a bid to promote good Health of the People.

## BUSINESS IDEA FOR DRYING FRUITS BY OSMO-AIR DEHYDRATION



### Introduction

There is a wide variety of fruits in Uganda. The problem is that fruits like mangoes, pineapples, jackfruit, etc., are very perishable. To retain the freshness, colour, flavor and texture of fruits, the fruits are Osmo-air dried. Osmo-air

dried fruits are widely used in ready-to-eat foods, ice creams, fruit salad, cakes and bakery. This activity can be set up in rural areas to benefit the rural people. The plant has a capacity of 31,200kgs per year allowing revenue estimates of US\$31,200 per year having invested US\$ 24,740.

### Production Process, Capacity and Technology

Fruits are selected, cleaned, washed, peeled, cured and sliced. The prepared fruits are then soaked in a sugar solution to remove water by osmotic pressure. The slices of fruits are then drained and dried in hot air. The fruits are then packed up in flexible pouches. The plant can have a minimum output of 100kg daily with output to be increased as demand does increase. This is on the basis of 8-hour work shifts in a day.

### Market Analysis

Osmo-air dried fruits are similar to fresh fruits so they are easy to market. Supply to Ice cream makers, Bakeries, Restaurants, Fast food places, etc. This Industry is not yet developed in Uganda.

### Capital Investment Requirement in US\$

Item	Unit	Qty	Price	Total
Syrup tank	No	1	500	500
Heating vessels	No	1	650	650
Nylon net	No	1	250	250
Plastic vats	No	1	150	150
Cross flow drier	No	1	1,100	1,100
Impulse sealer	No	1	150	150
Other tools & equipment	No	1	500	500
<b>Total cost of Machinery &amp; Tools</b>				<b>3,300</b>

1. Production costs assumed are for 312 days per year with daily capacity of 100 kgs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 days
5. Currency used is US Dollars.

### Production and Operation costs in US\$

#### (a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost /day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
Fruits	kgs	0.3	16.03	4.81	125.0	1,500
Sugar syrup	ltrs/kgs	1.1	0.80	0.88	22.9	275
Citric acid	ltrs	36	0.32	11.54	300.0	3,600
Packing material	kgs	0.5	48.08	24.04	625.0	7,500
<b>Sub-total</b>				<b>41</b>	<b>1,072.92</b>	<b>12,875</b>
<b>General Costs (Overheads)</b>						
Labour					400	4,800
Selling & distribution					120	1,440
Utilities (Water, power)					150	1,800
Administration					50	600
Rent					100	1,200
Miscellaneous expenses					100	1,200

Depreciation	69	825
<b>Sub-total</b>	<b>989</b>	<b>11,865</b>
<b>Total Operating Costs</b>	<b>2,061.62</b>	<b>24,740</b>

### Project Product Costs and Price Structure in US \$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Dried Fruits	100.0	31,200	0.79	24,740	1	31,200

### Profitability Analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	100	2,600	31,200
Less: Production and operating costs	79	2,062	24,740
<b>Profit</b>	<b>21</b>	<b>538</b>	<b>6,460</b>

### Source of Supply of Equipment and Raw Materials

Machinery can be imported from Japan, China and India. Fruits are locally grown in Uganda which makes them available in local markets all over the country.

### Government Incentives available

Uganda Investment Authority provides guidelines on investment and government incentives, policies and security matters.

## BUSINESS IDEA FOR EUCALYPTUS OIL EXTRACTION



### Introduction

The extraction of eucalyptus oil is an agro-based technology. The eucalyptus botanical name is *eucalyptus citriodora*. It is grown in almost all the districts of Uganda. It is propagated through seeds and transplanted after 40-45 days. The harvest is in every 3-4 months and economic life of the plant is more than 10years. The yield is 80kg of oil/ha and it is a fast growing tree that reaches a height of about 25 to 40 meters. The revenue estimate is US \$ **35,568** per annum from production capacity of 6,240kg and an investment of US \$ 24,075. Eucalyptus oil is used in a variety of industries including making toothpastes, pharmaceuticals, cosmetics and pesticides. It's lucrative and almost inexhaustible so; worth investing.

### Production process, Capacity

The chopped off leaves are subjected to steam distillation for extraction of oil. The mixture of oil and water is separated and then purified by fractional distillation. The extracted oil is stored in big containers and is sealed and packed for the market. The profiled plant has a minimum capacity of 20kg of oil per quarter, translating into 6,240 kg of oil per annum.

### Market Analysis

Eucalyptus oil is used in the manufacture of soaps, perfumes, pharmaceuticals, cosmetics, etc. These are fast growing industries. Therefore, there is a wide market in Uganda considering the fact that most of the eucalyptus oil used in Uganda is imported. The export potential of this product is also overwhelming. Oil extraction from Eucalyptus is not yet introduced in Uganda.

### Capital Investment Requirement in US \$

Item	Units	Qty	Cost	Total
Distillation unit	Numbers	1	3,500	3,500
Other tools and equipment	Numbers	4	75	300
Fractional distillation unit & condenser	Numbers	1	5,000	5,000
<b>Total cost of Machinery &amp; Tools</b>				<b>8,800</b>

1. Production costs assume 312 days per year with daily capacity of 20Kgs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

### Production and Operating Costs in US \$

#### (a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost/day	Pdn cost/mth	Pdn cost/yr
<b>Direct Costs</b>						
Eucalyptus leaves & twigs	Kgs	0.10	154	15	400	4,798.5
Fuel	Ltrs	1	20	23	598.	7,176.00
<b>Sub-total</b>				<b>38</b>	<b>997.8</b>	<b>11,974.5</b>
<b>General Costs (Overheads)</b>						
Labour					550	6,600
Selling & distribution					100	1,200
Utilities (Water, power)					100	1,200
Rent					50	600
Miscellaneous expenses					25	300
Depreciation					183	2,200
<b>Sub-total</b>					<b>1,008</b>	<b>12,100</b>
<b>Total Operating Costs</b>					<b>2,006</b>	<b>24,075</b>

### Project product costs and Price Structure in US \$

Item	Qty/day	Qty/yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Eucalyptus oil	20	6,240	3.9	24,075	5.7	<b>35,568</b>

### Profitability analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	114	2,964	35,568
Less: Production and operating costs	77	2,006	24,075
<b>Profit</b>	<b>37</b>	<b>958</b>	<b>11,493</b>

### Source of Supply of Equipment and Raw Materials

The machinery for this kind of project can be imported from India.

### Government Intervention

The Government of Uganda through Uganda Investment Authority allocates Land to potential Investors in the Manufacturing Industry.

**BUSINESS IDEA FOR MAKING FRUIT**



**CHEESE**

**Introduction:**

Fruit cheese is a delicious nutritious fruit based confectionery containing fruit pulp, sugar, butter, or hydrogenated fat, salt, colour, etc. which is heated to high sugar content and wrapped in films to protect from moisture. Fruit cheese is a product with a high shelf life. The investment can cost US\$ 10,869 yielding estimated revenue of US\$ 18,720 annually with production capacity of 31, 200kgs per year.

**Production process, Capacity and Technology**

Any ripe fruit such as: mango, guava, jackfruit, banana, etc. is peeled, cored and pulped. Sugar along with butter, salt, colour is added and cooked into a thick mass, which is poured on greased trays and spread to half-an –inch layer. The mixture is cooled and cut into suitable sizes and wrapped in polythene films and released to the market.

**Market Analysis**

Because of its taste, flavour and nutritional values, fruit cheese is cherished by both the rural and urban population. There would be need for massive advertisement since fruit cheese would be a relatively new product. Supermarket chains, restaurants, fast food shops, educational institutes etc would form a good supply chain for the product. However, this Industry is not yet developed in Uganda; most of these Items are imported.

**Capital investment Requirement in US \$**

Item	Units	Qty	Cost	Total
Pulper	No	2	600	1,200
LPG pressure & gas cylinder	No	1	500	500
Refractometer	No	1	150	150
Weighing balance	No	2	25	50
Cutters & knives	No	1	75	75
Packing machine	No	1	150	150
Trays	No	10	15	150
<b>Total cost of Machinery &amp; Tools</b>				<b>2,275</b>

1. Production costs assume 312 days per year with daily capacity of 100 Kgs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

**Production and Operating costs in US\$**

(a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost /day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
Fruits	Kgms	0.20	32	6	167	2,000.00
Sugar	Kgms	1	3	3.53	91.67	1,100.00
Butter hydrogenated fat	Kgms	3	10	24.04	625.00	7,500.00
Salt	Kgms	0.3	0.3	0.10	2.50	30.00
Colour flavour	Kgms	2	0.16	0.24	6.25	75.00
Packaging film	Pkts	2	3	4.81	125.00	1,500.00
<b>Sub-total</b>				<b>10</b>	<b>258.33</b>	<b>3,100.00</b>
<b>General Costs (Overheads)</b>						
Labour					350	4,200
Selling & distribution					100	1,200
Utilities (Water, power)					75	900
Rent					50	600
Miscellaneous expenses					25	300
Depreciation					47	569
<b>Sub-total</b>					<b>647</b>	<b>7,769</b>
<b>Total Operating Costs</b>					<b>905.72</b>	<b>10,868.7</b>

**Project product cost and Price Structure in US \$**

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/ yr (\$)	Unit price	Total rev(\$)
Fruit Cheese	100	31,200	0.3	10,869	0.6	<b>18,720</b>

**Profitability Analysis in US \$**

Profitability Item	Per day	Per month	Per year
Revenue	60	1,560	18,720
Less: Production and operating costs	10	906	10,869
<b>Profit</b>	<b>50</b>	<b>654</b>	<b>7,851</b>

**Source of Supply of Equipment and Rawmaterials:**

Fruits which constitute the major inputs requirements are readily available in Uganda especially Eastern, Northern & Western Regions. Equipment may be imported from China and India.

**Government Incentives available:**

Uganda Investment Authority on behalf of the Government supports Agro-processing Industries in Form of Tax exemptions, Free Land, among others in a bid to promote Agro-processing.

## BUSINESS IDEA ON ICE CREAM MAKING



### Introduction:

Ice cream is a frozen dessert usually made from dairy products such as: milk and often combined with other ingredients and flavours. Most varieties contain sugar although some are made with other sweeteners. Alternatively it can be made from soya milk, rice milk and goat milk for those who are lactose intolerant or allergic to dairy products and soya and rice for those who avoid dairy products. The production capacity is 38,398kg per year yielding revenue of US \$95,995 per annum from an investment of US \$57,832.

### Production Process, Capacity and Technology

The basic steps in manufacturing ice cream are generally as follows: Blending of the mix ingredients, pasteurization, homogenization, ageing the mixture, freezing, packaging and hardening. Ice-cream represents a congealed dairy product produced by freezing a pasteurized mixture of milk, cream, and milk solids other than fat, sugars, emulsifier and stabilizers.

### Market Analysis

There are two types of ice-cream, soft and hard available on the market. Ice cream is readily marketable as its consumed by all sections of society. What is needed is strategic location of the business. The major key players in this sector includes; Snowman, FidoDido, BIMBO, among others.

### Capital Investment Requirement in US \$

Item	Units	Qty	Cost	Total
Mixing / blending machine	No	1	3,000	3,000
Homogenization machine	No	1	3,000	3,000
Ageing % storage vat	No	1	3,000	3,000
Batch Freezers	No	2	1,500	3,000
Pasteurization machine	No	1	3,000	3,000
Hardening machine	No	1	3,000	3,000
Storage (Refrigerated)	No	1	3,000	3,000
Distribution Van	No	1	7,000	7,000
<b>Total cost of Machinery &amp; Tools</b>				<b>28,000</b>

1. Production costs assume 312 days per year with daily capacity of 123Kgs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

### Production and Operating cost in US\$

(a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty/day	Pdn cost/day	Pdn cost/mth	Pdn cost/yr
<b>Direct Costs</b>						
milk (solid/ fat)	Kgms	2.25	38	87	2,250	27,000.
sugar,	Kgms	1	10	11.00	286.	3,432
Flavourings, Candies & fruits	Kgms	3	2	5.00	130	1,560
Stabilizers / emulsifiers	Kgms	2	0.16	0.24	6.25	75.00
Eggs	Trays	2	2	4.50	117.	1,404.
<b>Sub-total</b>				<b>98</b>	<b>2,536.</b>	<b>30,432</b>
<b>General Costs (Overheads)</b>						
Labour					800	9,600
Selling & distribution					100	1,200
Utilities (Water, power)					500	6,000
Rent					200	2,400
Miscellaneous expenses					100	1,200
Depreciation					583	7,000
<b>Sub-total</b>					<b>2,283</b>	<b>27,400</b>
<b>Total Operating Costs</b>					<b>4,819.</b>	<b>57,832</b>

### Project product cost and Price Structure in US\$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Ice Cream	123	38,398	1.5	57,832	2.5	95,995

### Profitability analysis in US\$

Profitability Item	Per day	Per month	Per year
Revenue	308	8,000	95,995
Less: Production and operating costs	86	2,224	57,832
<b>Profit</b>	<b>222</b>	<b>5,775</b>	<b>38,163</b>

### Source of Supply of Equipment and Rawmaterials

This can be source from India or China and raw materials from local dairies like: Fresh dairy, GBK and other dairy suppliers.

### Government Incentives

The Government of has supported the growth of Agro-processing Industry through liberalised market.



## BUSINESS IDEA ON MAKING LEATHER LUGGAGE BAGS



### Introduction

Leather luggage bags are popular items because of their durability. An important item to luggage, leather bags are made from a combination of materials, varied fashion designs and colours, etc.

The leather luggage bags are made from a variety of finished leather. Most industries use printed leather, soft leather, etc., as these are indigenous and locally available. This is a skilled labour oriented industry which can be started in any place and it can as well be a domestic industry. The project cost is US\$ 20,315 with a capacity of 18,720 bags annually and revenue estimates of US\$ 33,696 per year.

### Production Process & Capacity

After creating a pattern, leather is cut and then skived, adhesive is applied and lining done with the edges beaded and the zip fixed. With the help of a sewing machine, the components are stitched. Later, the excess lining is trimmed and the stitched bag is reversed inside out. Handles are fitted; colour is applied, followed by polishing and finishing. The product is ready to be released to the market. The profiled plant has a capacity of 1,560 bags per month on the basis of 26 working days.

### Market Analysis

There has been a steady growth in terms of demand for leather goods giving this industry potential to export. Synthetic bags have a short life span and are very unreliable. The domestic market is open where quality products are produced. This Industry is not yet developed in Uganda.

### Capital Investment Requirements in US \$

Item	Units	Qty	Price	Total
flat bed sowing machine	Number s	1	1,750	1,750
Industrial stitching machine	Number s	1	2,500	2,500
Leather skiving machine	Number s	1	1,750	1,750
Name endossing machine	Number s	1	500	500
Other tools		4	125	500
<b>Total cost of Machinery &amp; Tools</b>				<b>7,000</b>

1. Production costs assume 312 days per year with daily capacity of 60 Bags.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

### Production and Operating Costs

#### (a) Direct Materials ,Supplies and Repairs

Cost Item	Unit s	Uni t Cos t	Qty /da y	Pd n cost /da y	Pdn cost /mth	Pdn Cost /yr
<b>Direct Costs</b>						
Lather	mtrs	2	4	8.00	208.00	2,496.00
Fabric	mtrs	2	1	2.00	52.00	624.00
Synthetic fabric	mtrs	4	2	8.00	208.00	2,496
Nails	Kgm s	1	0.01	0.01	0.26	3.12
Glue	Ltres	5	0.13	0.65	16.90	202.80
Zips/button s	pkts	8	0.12	0.96	24.96	299.52
Threads	Rolls	1	2	2.00	52.00	624.00
Other materials	-	-	-	-	20.00	240.00
<b>Sub-total</b>				<b>22</b>	<b>582.12</b>	<b>6,985</b>
<b>General Costs (Overheads)</b>						
Labour					420	5,040
Selling & distribution					150	1,800
Utilities					80	960
Rent					100	1,200
Administration expense					65	780
Miscellaneous expenses					150	1,800
Depreciation					146	1,750
<b>Sub-total</b>					<b>1,111</b>	<b>13,330</b>
<b>Total Operating Costs</b>					<b>1,692.92</b>	<b>20,315</b>

### Project product cost and Price Structure in US \$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost /yr	Unit price	Total rev
Luggage bags	60	18,720	1.1	20,315	1.8	33,696

### Profitability Analysis in US \$

Profitability Item	Per day	Per month	Per year
Revenue	108	2,808	33,696
Less: Production and operating costs	65	1,693	20,315
<b>Profit</b>	<b>43</b>	<b>1,115</b>	<b>13,381</b>

### Source of Supply of Equipment and Rawmaterials

India or China could be a good source, but you need to be careful about the quality of the equipment. Switzerland, Belgium, Germany would provide sophisticated but durable equipment. Leather can be locally obtained or imported from Kenya.

**Government Incentives**

The government is encouraging the use of local raw materials and value addition to the exports.

## BUSINESS IDEA FOR MAKING LLDPE MAILING COVER / ENVELOPES



### Introduction

Linear low-density polyethylene (LLDPE) is a linear polymer, with short number of branches; it has a narrower molecular weight. LLDPE mailing covers and envelopes are a good substitute for the conventional paper covers. Aesthetically designed and lightweight, these envelopes also save on postage charges and can be recycled, have excellent wear and tear resistance and are durable. A plant to make such products can be put up anywhere in Uganda, and it can cost US\$78,055 with a production capacity of 50,000Kgs per year and estimated revenue of US\$109,996 annually.

### Production Process, Capacity and Technology

The LLDPE granules along with fillers and pacifiers are charged into the blown film extruder, to melt and are homogenized and blown vertically upwards through a die and taken up by rollers. The air bubble controls the width of the film. The bubble is cooled by a jet of air. The film is treated for better printability and wound over paper tubes. These rolls are printed and converted in the form of envelope by cutting and side sealing. The profiled plant has a minimum capacity of 50 tonnes per annum on the basis of 312 working days in a year.

### Market Analysis

LLDPE mailing covers are used for sending documents, brochures, annual reports, magazines, shareholder certificates, etc., through post or couriers. Other features are that they are lightweight, high tear resistant, printable and economic as they can be easily protected from dust & rain, etc which makes this product easily marketable. The major key players include; Riley packaging, among others.

### Capital Investment Requirement in US \$

ITEM	Units	Qty	Price	Total
Blown film extruder	No.	1	4500	4500
Bag making machine	No.	1	3750	3750
printing machine	No.	1	2000	2000
Weighing balance	No.	2	25	50
<b>Total cost of tools &amp; Equipment</b>				<b>10,300</b>

1. Production costs assume 312 days per year with daily capacity of 160 Kgs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

### Production and Operation in US \$

(a) Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty/day	Pdn cost/day	Pdn cost/mth	Pdn cost/yr
<b>Direct Costs</b>						
LLDPE	Kgms	7.00	13	88	2,275	27,300.00
Filter & pacifiers	Kgms	100	1	50.00	1,300.00	15,600.00
Terpene	Ltrs	30	1	29.50	767.00	9,204.00
Other materials / chemicals	Ltrs	75	1.00	75.00	1,950.00	23,400.00
<b>Sub-tot</b>				<b>138</b>	<b>3,575.00</b>	<b>42,900.00</b>
<b>General Costs (Overheads)</b>						
Labour					1,115	13,380
Selling & distribution					100	1,200
Utilities (Water, power)					1,000	12,000
Rent					400	4,800
Miscellaneous expenses					100	1,200
Depreciation					215	2,575
<b>Sub-total</b>					<b>2,930</b>	<b>35,155</b>
<b>Total Operating Costs</b>					<b>6,504.5</b>	<b>78,055</b>

### Project product and Price Structure in US \$

Item	Qty/day	Qty/yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
LLDPE Envelopes	160	49,998	1.6	78,055	2.2	109,996

### Profitability Analysis in US \$

Profitability Item	Per day	Per month	Per year
Revenue	353	9,166	109,996
Less: Production and operating costs	115	3,002	78,055
<b>Profit</b>	<b>237</b>	<b>6,164</b>	<b>31,941</b>

### Source of Supply of Equipment and Rawmaterials

The machinery and Rawmaterials can only be imported since they are specialized i.e. from USA, China, India, etc.

## BUSINESS IDEA FOR MOBILE FOOD VENDING



Model 325 Towable Concession Trailer

### Introduction

This proposal is production and mobile vending of food. About 200 covers would be produced daily. The Project costs are US \$60,971 per annum and estimated revenues stand at US \$74,880 per year with a production of 62,400 covers per annum. Market potential is great since Hotels and restaurants are expensive and away from work places. This will deliver the food at the

required time and take away the utensils soon. This service limits the movement of workers and makes them more productive.

### Production, Capacity and Technology

A variety of food stuffs would form the menu for this venture. Different foods are prepared, cooked by boiling, frying, steaming, baking, stewing. This is then packed in containers that are taken to different service points and some delivered directly to offices or business premises. Mobile vans or motor bikes can be used to transport the food.

### Market Analysis

Food is a human necessity and therefore the market for this business is guaranteed. What is required here is ensuring quality food, fast and reliable service. There are many players in this Industry spread across the country.

### Capital Investment Requirement in US \$

Item	Units	Qty	Price	Total
Distribution vans	No	2	5,000	10,000
cooking pans	No	10	25	250
warmers	No	12	38	450
plates	No	150	2	225
glasses	No	150	0	38
cutlery	No	200	1	100
Dish washer, wipers, trays, serviettes, stuck buckets	No	1	1,150	1,150
<b>Total cost of Machinery &amp; Tools</b>				<b>12,213</b>

1. Production costs assumed 312 days per year with daily capacity of 200 Covers.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include materials, supplies and all other costs that directly go into production of a product
4. A production month is assumed to have 26 days.
5. Currency used is US Dollars.

### Production and Operating cost in US \$

(a)Direct materials, supplies and costs

Cost Item	Units	Unit Cost	Qty /day	Pdn cost /day	Pdn cost /mth	Pdn cost /yr
<b>Direct Costs</b>						
Food stuffs(rice ,posho, potatoes & cassava bananas,)	Kgms	1.50	30	45	1,170	14,040
Cooking oil	ltres	1 1/2	1.0	1,500	39	468
sausces) (meat, chicken,gnuts, beans, greens ,peace etc	Kgms	3.75	25.	94	2,438	29,250
Spices, onions, tomatoes etc	Kgms	2.50	3	8	195	2,340
Drinks	Pkts	1	10	5.	130.00	1,560
<b>Sub-total</b>				<b>153</b>	<b>3,971.50</b>	<b>47,658</b>
<b>General Costs (Overheads)</b>						
Labour					610	7,320
Selling & distribution					75	900
Utilities (Water, power)					45	540
Rent					100	1,200
Miscellaneous expenses					25	300
Depreciation					254	3,053
<b>Sub-total</b>					<b>1,109</b>	<b>13,313</b>
<b>Total Operating Costs</b>					<b>5,080.90</b>	<b>60,971</b>

### Project product costs and Price structure in US \$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr	Unit price	Total rev
Food	200	62,400	1.0	60,971	1.2	74,880

### Profitability Analysis in US \$

Profitability Item	Per day	Per month	Per year
Revenue	240	6,240	74,880
Less: Production and operating costs	195	5,081	60,971
<b>Profit</b>	<b>45</b>	<b>1,159</b>	<b>13,909</b>

### Source of Equipment and Materials:

All equipment is locally available. Food stuffs are available throughout the year.

### Government Incentives

Government ensures a liberalized free trade economy as long as you operate within the local authorities by-laws.

## BUSINESS IDEA FOR MAKING MOSQUITO COIL



### Introduction:

Mosquito coil is mosquito repelling incense usually shaped into a spiral; and typically made from a dried paste of pyrethrum powder.

The coil is usually held at the center of the spiral, suspending it in the air, or wedged by two pieces of fireproof nettings to allow continuous smoldering. Burning usually begins at the outer end of the spiral and progresses slowly toward the centre of the spiral, producing a mosquito-repellent smoke. A typical mosquito coil can measure around 15 cm in diameter and lasts up to 8 hours. Mosquito coils are widely used in Asia, Africa, and South America. The Production capacity is 312,000 boxes per year bringing estimated revenue of US\$ 93,600 annually having invested US\$ 76,304.

Mosquito repellent coils are one of the most popular means of driving out mosquito and insects out of the houses. The mosquito repellents are comparatively harmless with the main constituent pyrethrum extracted from the flowers of pyrethrum.

In Uganda, there is a high prevalence of mosquitoes mainly because of the high rainfall coupled with the warm weather favourable for breeding. Setting up a plant to make mosquito coils would help to fight mosquito bites and reduce malaria incidences.

### Production Process, capacity and technology

The raw materials are blended, kneaded and crushed. The mixture is extruded in the form of flat belt and cut by an air-blower. The belt shaped material is converted into moulds of double coils by a Rota stamping machine and finally packed in cartons. The plant profiled has a minimum capacity of 1,000 coil boxes per day.

### Market Analysis

There is good market potential because mosquitoes are a menace and malaria prevalence is quite high. A mosquito coil requires no electricity and is affordable in rural areas. However, this Industry is not yet developed in Uganda.

### Capital Investment Requirement in US\$

ITEM	Units	Qty	Price	Total
Powder blending machine	No	1	1125	1125
Crushing & Kneading machine	No	1	1500	1500
Extrusion Machine vessel with stirrer	No	2	750	1500
Cutting Machine with blower	No	2	1000	2000
Rota stamping Machine	No	1	27.5	27.5
Tube filling machine	No	1	125	125
<b>Total cost of tools</b>				<b>62,775</b>

1. Production costs assume 312 days per year with daily capacity of 32.1 Kgs.

2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.

3. Direct costs include: materials, supplies and all other costs incurred to produce the product.

4. A production month is 26 work days

5. Currency used is US Dollars.

### Production and Operating Costs in US \$

#### (a) Direct Materials ,Supplies and Costs

Cost Item	Units	Unit Cost	Qty /day	Pdn Cost /day	Pdn Cost /mth	Pdn Cost /yr
<b>Direct Costs</b>						
Pyrethrum	Kgms	2.50	3	8	208	2,499.90
Deodar sawdust	ltres	1.5	0.2	0.24	6	75.00
Maida wood bark	ltres	1.00	0.13	0	3	40.00
pyrethrum oleoresin	Pkts	2	31	46.7	1,214.95	14,579.4
Citronella oil	ltres	2	0.32	0.64	16.64	199.68
Benzoic acid	ltres	75	0.16	12.	312.00	3,744.00
Packaging boxes	kgs	2	3	6.40	166.40	1,996.80
Other materials / chemicals	Ltrs	50	1.00	50.	1,300.	15,600.
<b>Sub-total</b>	-	-	-	<b>124</b>	<b>3,227.9</b>	<b>38,734.8</b>
<b>General Costs (Overheads)</b>						
Labour					1,200	14,400
Selling & distribution					250	3,000
Utilities (Water, power)					900	10,800
Rent					500	6,000
Miscellaneous expenses					150	1,800
Depreciation					131	1,569
<b>Sub-total</b>					<b>3,131</b>	<b>37,569</b>
<b>Total Operating Costs</b>					<b>6,358.6</b>	<b>76,304.19</b>

### Project product cost and Price Structure in US\$

Item	Qty /day	Qty /yr	Unit Cost	Pdn cost/yr(\$)	Unit price	Total rev(\$)
Mosquito Coils	1,000	312,000	0.2	76,304	0.3	93,600

### Profitability Analysis in US \$

Profitability Item	Per day	Per month	Per year
Revenue	300	7,800	93,600
Less: Production and operating costs	245	6,359	76,304
<b>Profit</b>	<b>55</b>	<b>1,441</b>	<b>17,296</b>

### Source of Machinery and materials

Local fabricators can provide the raw materials such as: Tree shade Ltd, Mwanga II road –Kisenyi, Kampala or Tonet Ltd Kanyanya, Gayaza road or John Lugendo Co. Ltd, Ndeeba Masaka Rd. email [lugendojohn07@yahoo.com](mailto:lugendojohn07@yahoo.com). Kenya and the local market will provide raw materials.

**Government Incentive**

The Government has subsidised this sector through Tax exemptions.