

## Introduction

This document is Volume 2 of the Diaspora Resource Mobilization and Utilization Project Compendium of Investment and Business Opportunities. It is complimentary to Volume 1, which presents information on the economy and key sectors that present investment business opportunities.

It presents business ideas that have been identified as most responsive to the priorities in the various sectors. They are presented as one page summaries to give an insight of the feasibility of their implementation.

They also show the scale of investment, production o output volumes, values and profitability are provided as key information in these ideas, believed to be the critical data necessary for making an investment business decision.

The business ideas are presented in the following sectors:

1. Agriculture
2. Trade
3. Mining

| 4. | Social |
| :---: | :---: |
| 5. | Health |
| 6. | Tourism |
| 7. | Infrastructure |
| 8. | Education |
| 9. | Works and Transport |
| 10. | Oil and Gas |
| 11. | Forestry |

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## Agriculture Sector



## SETTING UP A CHICKEN HATCHERY

## Introduction

This business idea is aimed at setting up a Chicken Hatchery. It is premised on hatching eggs for layers and broilers for both local and hybrid birds. The business will be hatching 38,000 chicks per month, which translates into 456,000 chicks per year.

The revenue potential is estimated at US $\$ 45,805$ per month, which translates into US $\$ 549,657$ per year. The business has a good market demand throughout the year and can provide employment to youth and women. The production capacity of the hatchery is 38,000 eggs per month. The project initial total cost is US $\$ 19,500$ with a net profit margin of $88 \%$ with a payback period 3 years and 5 months.

## Process Description

Selected good eggs are collected and inserted into an incubator for 18 days. They are then transferred into a Hatchery for 3 days to hatch.

| Capital Investment Requirements in US\$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Item | Unit | Qty | $@$ | Total |
| Incubator | No. | 1 | 6,000 | 6,000 |
| Hatchery | No. | 1 | 6,000 | 6,000 |
| Feed mills \& Mixer | No. | 1 | 2,500 | 2,500 |
| Generator | No. | 1 | 5,000 | 5,000 |
| TC of Machinery |  |  | 19,500 |  |


| Production and Operation Costs in US\$ |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Item | Units | @/day | Qty | Prod. <br> cost/ <br> day | Prod. <br> cost/ <br> month | Prod. <br> cost/ <br> year |
| Parent stock | No. | 15 | 100 |  | 1,500 | 18,000 |
| Eggs | No. | 0.05 | 38,000 |  | 1,900 | 22,800 |
| Coffee husks | Tones | 15 | 1 |  | 15 | 180 |
| Disinfectants | Litres | 1.3 | 3 | 4 | 104 | 1,248 |
| Vaccines | Litres | 2.5 | 4 | 10 | 260 | 3,120 |
| Sub-total |  |  |  |  | 3,779 | 45,348 |

General costs (Overheads)

| Utilities (power) | 200 | 2,400 |
| :--- | :--- | :--- |
| Utilities (water) | 40 | 480 |
| Salaries | 360 | 4,320 |
| Feeds | 120 | 1440 |
| Fuel | 320 | 3,840 |
| Renting | 160 | 1,920 |
| Depreciation(Assets write off) Expenses | 406 | 4,872 |
| Sub-total | 1,606 | 19,272 |
| Total Operating Costs | 5,385 | 64,620 |

Production assumed 21 days in a month with a capacity of 38,000 eggs per press.

Depreciation (fixed assets write off) assumes 4 years life of assets write off of $25 \%$ per year.

| Project Product Cost and Price Structure in US\$ |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Items | Period | Output | $@$ | UPx | TC | TR |  |
| Layers | 21 days | 19,514 | 0.1 | 1.4 | 2,765 | 26,600 |  |
|  | per year | 234,168 |  |  | 33,184 | 327,825 |  |
| Broilers | 21 days | 18,486 |  |  |  |  |  |
|  | 0.1 | 1 | 2,620 | 18,000 |  |  |  |
|  | per year | 221,832 |  |  | 31,436 | 221,832 |  |
| Total |  | 456,000 |  |  | 64,620 | 549,657 |  |


|  |  |  |  |
| :--- | :--- | :--- | :--- |
| Profitability Analysis in US Dollars | per day | per month | per year |
| Profitability item |  |  |  |
| Revenue | 1,301 | 27,319 | 327,825 |
| Layers | 880 | 18,486 | 221,832 |
| Broilers | 256 | 5,385 | 64,620 |
| Less production \& operating costs | 3,368 | 40,419 | 485,037 |
| Profit | 599.19 | 21,258 | 255,100 |
| Layers | 210.19 | 26,375 | 316,500 |
| Broilers |  |  |  |

## Market Demand

The supply of one day chicks has a high demand both in rural and urban areas throughout the year. Market for the one day chicks from good breeders can be produced anywhere in the country to reduce transportation and sold within the country and to the neighboring countries

## Government Incentives Available:

Agriculture equipments, tools and chemicals are duty free on importation.

## Equipment Suppliers

Some of the equipments can be purchased from the local market; some are just imported from Europe, India, South Africa and China.

## Risk

The risk involved in this kind of business is poultry diseases like coccidiosis which can be mitigated by vaccination of the birds either weekly or monthly.

## Agriculture Sector



## BEE KEEPING (APICULTURE)

## Introduction

This business idea is for keeping bees for production of honey and bee wax. The Revenue potential is estimated at US $\$ 10,400$ per year with the project cost of US $\$ 7,345$ and a profit margin of $73 \%$. The expected payback period is 7 month.

## Process Description

Bee hives are opened after the bees have been smoked out using a smoke pump, honeycombs are pressed by hand. Honey is separated from the wax using pressing machines to produce better quality honey. Honey from a honeycomb is extracted, warmed, strained and bottled.

| Capital Investment Requirements in US Dollars |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Item | Unit | Qty | $@$ | Total |
| Centrifuge Machine | No. | 1 | 3,396 | 3,396 |
| Wooden beehives | No. | 50 | 16.71 | 836 |
| Smoker pumps | No. | 1 | 25.8 | 26 |
| Buckets | No. | 5 | 3 | 15 |
| Hive tools | No. | 4 | 1.5 | 6 |
| Protective wears | No. | 4 | 15 | 60 |
| Filtering sieves | No. | 4 | 1.5 | 6 |
| Land | Acre | 3 | 1000 | 3,000 |
| TC of Machinery | 7,345 |  |  |  |
|  |  |  |  |  |

## Production and Operating Costs in US\$

| Direct Materials, Supplies and Costs |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cost Item | Units | $@$ <br> Qty/ <br> day | Prod. <br> cost | Prod. Cost/ <br> month | Prod.Cost/ <br> year |  |
| Bee wax | Kgs | 0.6 | 10 | 6 | 156 | 1,872 |
| Sub total |  |  | 156 | 1,872 |  |  |

## General costs (Overheads)

| Utilities (power) | 15 | 180 |
| :--- | :--- | :--- |
| (Utilities (water) | 15 | 180 |
| Salaries | 50 | 600 |
| Sub-total | 80 | 960 |
| Total Operating costs | 236 | 2,832 |
| Production assumed 4 quarters per year |  |  |

Production assumed 4 quarters per year
Direct costs include: materials, supplies and other costs that directly go into production of the product.

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

| Item | Period | out put | UPx | Total cost | Total Revenue |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Honey | Per quarter | 200 | 7 | 4.515 | 1,400 |
|  | Per Year | 800 | 7 | 4.515 | 5,600 |
| Bee wax | Per quarter | 150 | 8 | 6.02 | 1,200 |
|  | Per year | 600 |  |  | 4,800 |
| Total |  |  |  |  | 10,400 |

## Profitability analysis in US\$

Profitability analysis in US\$

| Profitability item | Per Quarter | Rev per year |
| :--- | :--- | :--- |
| Revenue |  |  |
| Honey | 1,400 | 5,600 |
| Bee wax | 1200 | 4800 |
| Sub total | 2,600 | 10,400 |
| Less Prod \& Operating Costs | 903 | 2,832 |
| Profit | 1,697 | 7,568 |

## Market Demand

There is high demand for honey for home consumption, pharmaceutical use in making drugs and in most instances it has replaced the sugar intake among people with health complications. Some beekeepers salvage the combs to extract wax for making candles or at times it is mixed with maize flour to make ice-cream cones. In addition, wax is demanded by cobblers, makers of household textiles and garments.

## Government Incentives Available:

Government is supporting bee farmers through the National Agricultural Advisory Services (NAADS) Programme funding the activities and finding a market for products.

## Source of Information:

Ugandan Beekeepers Association
Faculty of Forestry and Nature Conservation (Makerere University) and National Agriculture Research Organisation (NARO)

## Risk involved in the Business:

The risk involved in this business is that there is never a "superhive", which could potentially disrupt the bees if there is an interruption. However, this can be mitigated through making diverse bee hives.

## Agriculture Sector



PIGGERY

## Introduction

This business idea is for rearing pigs. aimed at production and sale of 360 pigs annually. The revenue potential is estimated at US $\$ 86,850$ per year with a profit margin of $75 \%$. The total capital investment for the project is US $\$ 11,900$ and the payback period is almost 5 months. The business risk involved in this idea is the high rate of infection, which spreads quickly among the animals. However, this can be mitigated by increasing the animal's resistance e.g. by improving the quality of feeds.

## Technology and processes description

The items needed include shelter, feeds, piglets, water, feeding troughs and animal drugs. The pig rearing process involves feeding them very well, cleaning the pen, monitoring the health of the animals and have them grow to the weight of 80 Kgs and above to be ready for sell. Pigs also reproduce so you don't have to buy more piglets.

Scale of Investment

| Capital Investment Requirements in USD |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Capital Item | Units | Qty | $@$ | Amount |
| Wheel Barrows | No | 5 | 30 | 150 |
| Spades | No | 40 | 5 | 200 |
| Piglets | No | 25 | 50 | 1,250 |
| Piggery Shade | No | 1 | 10,000 | 10,000 |
| Feeding Troughs |  | 25 | 12 | 300 |
| Total |  |  |  | 11,900 |

Production and Operating Costs in US $\$$

| Item | Units | Unit <br> cost | Qty per/ <br> day | Pdn <br> Cost/ day | Pdn Cost/ <br> month | Pdn Cost/ <br> Year1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct costs3: |  |  |  |  |  |  |
| Feeds | Bags | 2 | 0 | 0 | 608 | 7,296 |
| Animal |  |  |  |  |  |  |
| Drugs |  | 0 | 0 | 0 | 23 | 276 |
| Other <br> Feeds |  | 0 | 0 | 0 | 42 | 504 |
| Sub-total |  |  |  |  | 840 | 8,076 |

General costs (Overheads)

| Labour | 400 | 4,800 |
| :--- | :--- | :--- |
| Utilities | 100 | 1,200 |
| Administrative expenses | 100 | 1,200 |
| Depreciation (Asset write off) Expenses | 496 | 5,950 |
| Sub-total | 1,096 | 13,150 |
| Grand Total | 1,936 | 21,226 |

Production is assumed for 365 days per year.

Depreciation assumes 2 year life of assets written off at 50\% per year for all assets.

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

| Item | Period | Out put | Unit Cost | Unit Price | TC | Total <br> Revenue |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pigs | 6 mnth | 195 | 109 | 150 | 21,226 | 29,250 |
| Pigs | 1 yr | 360 | 59 | 160 | 21,226 | 57,600 |
| TOTAL |  |  |  | 86,850 |  |  |

Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 238 | 7,238 | 86,850 |
| Less: Production and <br> Operating Costs | 58 | 1,769 | 21,226 |
| Profits | 180 | 5,469 | 65,624 |

## Sources of supply of equipments

All equipments and raw materials can be got in Uganda.

## Market Analysis

The structure of the pig market is wide throughout the year in butcheries as pork is popular among the public. There are several pork joints in the city and upcountry making demand for pork high.

## Risk

The animals are prone to diseases such as swine fever that need close monitoring by a Veterinary expert.

## Agriculture Sector



MAKING CORNFLAKES

## Introduction

Cornflakes are one of the most consumed breakfast cereals on account of their taste and nutritional value. They have a high market potential as they are consumed by adults, youth and children. This business idea aims at the production of 700 kilograms of cornflakes a day. The revenue potential is estimated at $\$ 436,800$, annually, at a sales margin of $75 \%$ with an initial capital investment cost of $\$ 30,543$. The payback period is about 7 months.

## Manufacturing Process

Maize grains are cleaned using air classifiers and after separated (large and small grains) using a mesh screen separator. The grains are then polished and milled to remove germs and bran. The milled grains are cooked in a rotary steam cooker where flavor syrups of sugar, malt, salt, and water are added. The grain pieces are then washed and small grains are separated.
The grains are then carried to an agitator pump or lump breaker then sent to a steamer where pre-heated air is blown into the grains so as to reduce the moisture content to the desired level of about $20 \%$. The dried material is then kept in a de-moisturizing tank for a few hours for moisture to equally be distributed. The grits (cooked material) are then washed again and passed through a heavy flaking machine where they are turned into flakes by pressing. The flakes are immediately transferred to a rotary oven for roasting. After roasting, the flakes are inspected, screened and graded to remove standard flakes. The flakes are then packed in water resistant polythene containers of waxed paper.

## Scale of Investment

Capital Investments Requirements

| Capital Investment Item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Brick stores for corn grain | No | 1 | 600 | 600 |
| Air classifiers | No | 2 | 650 | 1,300 |
| Separators | No | 3 | 610 | 1,830 |
| Storage bins | No | 6 | 550 | 3,300 |
| Weight balance | No | 1 | 300 | 300 |
| Rotary steam cooker | No | 1 | 1,820 | 1,820 |
| Agitator or lump breaker | No | 1 | 1,200 | 1,200 |
| Pan cooler or steamer | No | 1 | 600 | 600 |
| Germ separator | No | 1 | 480 | 480 |
| Heavy flaking machine | No | 1 | 3,191 | 3,191 |
| Rotary oven | No | 1 | 2,000 | 2,000 |
| Conveyer | No | 1 | 600 | 600 |
| Inspection conveyer | No | 1 | 550 | 550 |
| Packing machine | No | 1 | 700 | 700 |
| Screening and cooling equipment | No | 1 | 540 | 540 |
| Mixer | No | 1 | 300 | 300 |
| Mini boiler | No | 1 | 1,100 | 1,100 |
| Shifter | No | 1 | 600 | 600 |
| Office equipment | No |  |  | 532 |
| Installation, transportation. | No |  |  | 3,000 |
| Delivery van | No |  |  | 6,000 |
| TOTAL |  |  |  | 30,543 |
|  |  |  |  |  |

## Production and Operating Costs

Production and Operating Costs

| Item | Units | @/ day | Qty/ <br> day | Pdn Cost/ <br> day | Pdn Cost/ <br> month | Production <br> Cost/Year1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct costs3: |  |  |  |  |  |  |
| Maize | Kgs | 0.189 | 1,000 | 189 | 4,914 | 58,968 |
| Salt | Kgs | 0.45 | 50 | 22.5 | 585 | 7,020 |
| Sub total |  |  |  |  | 5,499 | 65,988 |

General costs (Overheads)
General costs (Overheads)

| Labour | 1,000 | 12,000 |
| :--- | :--- | :--- |
| Utilities | 1,000 | 12,000 |
| Selling and Distribution | 300 | 3,600 |
| Administrative expenses | 200 | 2,400 |
| Shelter | 500 | 6,000 |
| Depreciation Expenses | 487.63 | 5,852 |
| Sub-total | 3,488 | 41,852 |
| Total Operating Costs | 8,987 | 107,840 |

Production is assumed for 312 days per year.
Depreciation assumes 5 year life of assets written off at $20 \%$ per year for all assets. A production Month is assumed to have 26 work days.

Project product Costs and Price Structure in US\$

| Item | Qty /day | Qty/yr | $@$ | Pdn/yr | UPx | Total Revenue |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Corn flakes | 700 | 218,400 | 0.5 | 107,840 | 2 | 436,800 |
| Total |  | 218,400 |  | 107,840 |  | 436,800 |

Profitability Analysis

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 1,400 | 36,400 | 436,800 |
| Production and operating costs | 346 | 8,987 | 107,840 |
| Profit | 1,054 | 27,413 | 328,960 |

Sources of Equipment
Equipments can be got from Uganda at a cheaper price although their quality may not be comparable to those imported from India.

## Government facilities and incentives

This is an industry in line with government policy of adding value to local produce.

## Risk:

The quality of the product may be compromised if proper production processes are not followed, hence, there is need for strict process and quality control measures providing checks at each production stage.

## Agriculture Sector

## Production and Operating Costs in US\$

| Cost Item | Units | @ | Qty per <br> day | Pdn cost <br> per day | Pdn cost// <br> month | Pdn cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Overheads: <br> G. nuts Kgs |  |  |  |  |  |  |
| 0.8 |  |  |  |  |  | 71 |
| 56.8 | $1,476.8$ | 17,722 |  |  |  |  |
| Soy beans | Kgs | 0.3 | 32 | 9.6 | 249.6 | 2,995 |
| Pop corn | Kgs | 0.3 | 64 | 19.2 | 499.2 | 5,990 |
| Cow peas | Kgs | 0.3 | 64 | 19.2 | 499.2 | 5,990 |
| Packaging <br> material | Pcs | 0.05 | 300 | 15 | 390 | 4,680 |
| Sub-total |  |  |  |  |  |  |

General Costs (Overheads):

| Field collection fuel | 125 | 1,500 |
| :--- | :--- | :--- |
| Rent | 300 | 3,600 |
| Utilities | 120 | 1,440 |
| Selling \& distribution | 50 | 600 |
| Salaries \& wages | 200 | 2,400 |
| Miscellaneous expenses | 30 | 360 |
| Depreciation | 424 | 5,093 |
| Sub-total | 1,249 | 14,993 |
| Total Operating Costs | 4,364 | 52,370 |

1) Production costs assumed 312 days per year with daily capacity of packing 231kgs of grains.
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 packaging of the grain.
4) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

## Market Analysis

The market for grains readily exists and their demand continues to grow mainly across borders to such places as Southern Sudan.

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/ <br> year | $@$ | Pdn cost/ <br> year | UPx | Total <br> revenue |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| G. Nuts | 71 | 22,130 | 0.73 | 16,096 | 1.3 | 28,769 |
| Soy Beans | 32 | 9,974 | 0.73 | 7,254 | 1.2 | 11,969 |
| Pop Corn | 64 | 19,948 | 0.73 | 15,510 | 1.3 | 25,932 |
| Cow Peas | 64 | 19,948 | 0.73 | 15,510 | 1.3 | 25,932 |
| Total | 231 | 72,000 |  | 52,370 |  | 92,602 |

Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 297 | 7,717 | 92,602 |
| Less: Production \& Operating Costs | 168 | 4,364 | 52,370 |
| Profit | 129 | 3,353 | 40,232 |

## Government Facilities and Incentives

Generally, food products are VAT exempt and hence taxes are minimized.

## Risk

The business risk involved is price fluctuation, which may affect the targeted profits. However, this can be minimized by setting up buffer stocks in times of low prices and resell later when they are high.

## Agriculture Sector



## MAKING INSTANT COFFEE POWDER

## Introduction

Coffee is a household crop in Uganda and a major foreign exchange earner. It is widely produced and many Ugandans take it as a beverage, and world over it is a cherished drink. The demand for coffee as a beverage is on the rise locally and any venture in its production and distribution is viable as it involves adding value to the coffee beans.

This project involves milling coffee beans into desired powder and sold over the counter to a waiting customer. The project requires an estimated fixed capital of US\$ 5,300, operating costs of US\$ 64,841 generating revenue of US $\$ 116,064$ in the first year of operation. The payback period is 5 months.

## Production Process

The process is simple .Coffee beans are roasted first using a coffee roaster and then blended

## Capital Investment Requirements

| Capital Investment Item | Units | Qty | $@$ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Coffee Grinder(20kgs-2HP\&starter) | No | 1 | 2,500 | 2,500 |
| Coffee Roaster(1.5HP\&starter) | No | 1 | 1,400 | 1,400 |
| Sealing machine | No | 1 | 200 | 200 |
| Sieves | No | 5 | 20 | 100 |
| Utensils | No | - | - | 400 |
| Furniture \& Fittings | No | - | - | 700 |
| Total |  |  |  | 5,300 |

## Production and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost/ <br> Day | Pdn <br> Cost/ <br> month | Pdn <br> Cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Fresh Coffee <br> Nuts | Kgs | 1.1 | 15 | 16.5 | 429 | 5,148 |
| Chicory Nuts | Kgs | 2 | 7 | 14 | 364 | 4,368 |
| Packaging <br> materials | Pcs | 0.25 | 350 | 87.5 | 2,275 | 27,300 |
| Sub-total |  |  | 372 | 118 | 3,068 | 36,816 |

## General costs(Overheads)

| Rent | 325 | 3,900 |
| :--- | :--- | :--- |
| Labour | 1,050 | 12,600 |
| Selling and Distribution | 150 | 1,800 |
| Cleaning and Toiletries | 104 | 1,248 |
| Utilities | 475 | 5,700 |
| Miscellaneous | 121 | 1,452 |
| Depreciation | 110 | 1,325 |
| Sub-total | 2,335 | 28,025 |
| Total Operating Costs | 5,403 | 64,841 |

1) Production costs assumed 312 days per year with daily capacity of producing 25 kgs of instant coffee powder.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> Cost/yr | UPx | Total Rve |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Instant Coffee | 400 | 124,800 | 0.5 | 64,841 | 0.93 | 116,064 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 372 | 9,672 | 116,064 |
| Less: Production and Operating Costs | 212 | 5,514 | 64841 |
| Profit | 160 | 4,158 | 51,223 |

## Market Analysis

The demand for instant coffee is on the rise especially among affluent people in society who are . urban based and from the middle class. Its potential is promising. The revival of coffee shops of the seventies would go a long way to tap the market and popularize the product.

## Government Incentive

A kilo of this instant coffee powder would fetch a lot more than the raw coffee beans. There are no taxes imposed on exports and any Value Added Tax (VAT) input is claimed and reimbursed by the tax body as a way of encouraging and facilitating exporters.

## Agriculture Sector



## MAKING BANANA WAFERS

## Introduction:

Banana Wafers are a popular snack eaten world over. They are made by cutting bananas into thin slices. This project uses the banana variety commonly known as Matooke in Uganda and is readily available. Wafers can simply be eaten directly or as desserts and puddings. It is a cross cutting venture as it can be undertaken in both rural and urban settings. The project initial cost is US\$ 1,318 producing $46,800 \mathrm{kgs}$ of banana wafers per year giving an estimated revenue of US $\$ 35,100$ annually with a profit margin of 475 and a payback period of about 4 month.

## Production,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 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 150 kg per 8 hours but there are also equipments with bigger capacity if needed. The technology involved can be locally accessed within Uganda, which makes it affordable.

## Capital Investment Requirement in US \$:

| Item | Units | Qty | Price | Total |
| :--- | :--- | :--- | :--- | :--- |
| Peeling machine | No | 1 | 500 | 500 |
| Slicing machine | No | 1 | 300 | 300 |
| Deep fat frying pans | No | 1 | 150 | 150 |
| Impulse sealer | No | 2 | 34 | 68 |
| Salt mixing drum | No | 1 | 125 | 125 |
| Weighing balance | No | 1 | 50 | 50 |
| Oil extraction machine | No | 1 | 125 | 125 |
| Total Cost of Machinery \& Tools | 1,318 |  |  |  |

Production and Operating Costs in US \$

| Cost Item | Units | Unit <br> cost | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct material Costs <br> Bananas | Kgms | 0.003 | 150 | 0.45 | 11.7 | 140.4 |
| Cooking oil | Litres | 2 | 10 | 20 | 520 | 6,240 |
|  <br> Flavour | Kgs | 4 | 1 | 4 | 104 | 1,248 |
| Polythene <br> bags | Packets | 1 | 0.01 | 0.01 | 0.26 | 3.12 |
| Sub-total |  |  |  | 24.5 | 636 | 7,631 |

General Costs (Overheads)

| Labour | 260 | 3,120 |
| :--- | :--- | :--- |
| Selling \& distribution | 100 | 1,200 |
| Utilities | 250 | 3,000 |
| Rent | 120 | 1,440 |
| Miscellaneous expenses | 150 | 1,800 |
| Depreciation | 27 | 329 |
| Sub-total | 907 | 10,889 |
| Total Operating Costs | 1,543 | 18,520 |

1. Production costs assume 312 days per year with daily capacity of 150 Kgs . 2. Depreciation of fixed asset is assumed at $25 \%$ per year.
2. Direct costs include: materials, supplies and all other costs incurred to produce the product.
3. A production month is 26 work days
4. Currency used is US Dollars

## Project Product cost and Price Structure in US $\mathbf{\$}$

| Item | Qty/day | Qty/yr | @ | Pdn cost/yr | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Wafers | 150 | 46,800 | 0.40 | 18,520 | 0.75 | 35,100 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 112.5 | 2,925 | 35,100 |
| Less: Production and operating costs | 59 | 1,543 | 18,520 |
| Profit | 53 | 1,382 | 16,580 |

## Market

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, they can capture a lot of consumer attention even in the international market. They can also be produced in different styles or designs.

## Source of Equipment and Raw Materials:

Machinery can be fabricated locally by Tree Shade Ltd located at Mwanga II Kisenyi Kampala or could be imported. Bananas are easily available in the local market all over the country.

## Agriculture Sector

## ICE CREAM MAKING

## Introduction:

Ice cream is a frozen dessert usually made from diary products such as: milk and cream, which are often combined with other ingredients and flavours. Most varieties contain sugar although some are made with other sweetners. Alternatively, it can be made from milk from soya, rice and goat for those who are lactose intolerant or allergic to diary products and would like to avoid them. The production capacity is $38,376 \mathrm{~kg}$ per year yielding revenue of US $\$ 107,453$ per annum from an investment with an initial cost of US $\$ 26,600$. The project net profit margin is $45 \%$ with a payback period of 2 years and 5 months.

## Production, Capacity and Technology

The basic steps involved in the manufacturing of ice cream are: Blending of the mixed 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.
Capital Investment Requirement in US \$

| Item | Units | Qty | Cost | Total |
| :--- | :--- | :--- | :--- | :--- |
| Mixing / blending machine | No | 1 | 3,300 | 3,300 |
| Homogenization machine | No | 1 | 2,800 | 2,800 |
| Ageing \% storage vat | No | 1 | 2,500 | 2,500 |
| Batch Freezers | No | 2 | 1,500 | 3,000 |
| Pasteurisization machine | No | 1 | 3,000 | 3,000 |
| Hardening machine | No | 1 | 2,500 | 2,500 |
| Storage (Refrigerated) | No | 1 | 2,500 | 2,500 |
| Distribution Van | No | 1 | 7,000 | 7,000 |
| Total Cost of Machinery \& Tools |  |  |  | 26,600 |

## Production and Operating cost in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Direct Costs of materials and supplies |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Milk (solid/ <br> fat) | Kgs | 2.25 | 38 | 85.5 | 2,223 | 26,676 |  |
| Sugar, | Kgs | 1 | 10 | 10 | 260 | 3,120 |  |
| Flavourings, <br>  <br> fruits | Kgs | 3 | 2 | 6 | 156 | 1,872 |  |
| Stabilizers / <br> emulsifiers | Kgs | 2 | 0.16 | 0.32 | 8 | 100 |  |
| Eggs | Trays | 2 | 2 | 4 | 104 | 1,248 |  |
| Sub-total |  |  |  | 106 | 2,751 | 33,016 |  |

## General Costs (Overheads)

| Labour | 800 | 9,600 |
| :--- | :--- | :--- |
| Selling \& distribution | 100 | 1,200 |
| Utilities (Water, power) | 400 | 4,800 |
| Rent | 200 | 2,400 |
| Miscellaneous expenses | 100 | 1,200 |
| Depreciation | 554 | 6,650 |
| Sub-total | 2,154 | 25,850 |
| Total Operating Costs | 4,905 | 58,866 |

1. Production costs assume 312 days per year with daily capacity of 123 K s. 2. Depreciation of fixed asset assumes 4 year life of assets written off at $25 \%$ per year for all assets.
2. Direct costs include: materials and supplies used in product production.
3. A production month is 26 work days
4. Currency used is US Dollars.

Project product cost and Price Structure in US\$

| Item | Qty/day | Qty/ <br> year | @ | Pdn <br> cost/yr | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ice Cream | 123 | 38,376 | 1.53 | 58,866 | 2.8 | 107,453 |

## Profitability analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 344.4 | 8,954 | 107,453 |
| Less: Production and <br> operating costs | 189 | 4,905 | 58,866 |
| Profit | 156 | 4,049 | 48,587 |

## Market

There are two types of ice-cream, soft and hard available on the market. Ice cream is readily marketable as It is consumed widely. What is important is the strategic location of the business.

## Source of Equipment and Materials

The equipment can be sourced from India or China and raw materials are available from local diaries like: Fresh diary, GBK, Jesa diary and other diary suppliers.

## Government facilities

Start up cost at $25 \%$ granted on actual costs over the first four years in equal installments.

## Risk

The business risk involved here is that the product is highly perishable if the product is not well stored and the drastic market dynamic due to weather changes.

## Agriculture Sector



## PUTTING UP <br> AN ANIMAL FEED PLANT

## Introduction

Animal feed plant is a place where their feeds are made. The need for balanced animal feeds forms an essential part of the intensive diary development programme. What is proposed here, is the setting up of an animal feed manufacturing plant using local products like maize, millet and wheat. The business idea aims at the production of $93,600 \mathrm{kgs}$ of animal feeds per year. The revenue potential is estimated at US\$ 121,680 annually, while the initial capital investment required is US\$7,150. The payback pay period for this project is approximately 6 months with a net profit margin of $50 \%$.

## Plant Capacity

The plant in this profile has a minimum capacity of 300 kgs of animal feed per day thus $93,600 \mathrm{kgs}$ per annum.

## Production Process

The process involves blending of various ingredients by using a disintegrator to reduce to the size of the required mesh size, which is uniformly mixed with vitamins, minerals by a ribbon blender. Molasses are added and then the mix is extruded to get pallets of the finished product, which are packed in gunny bags for marketing.

## Scale of Investment

## Capital Requirements in US\$

| Capital Item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :---: |
| Ribbon blender | No | 1 | 3,150 | 3,150 |
| Gyratory shifter | No | 1 | 1,800 | 1,800 |
| weighing machine | No | 1 | 500 | 500 |
| Gunny bag sealing machine | No | 1 | 1,300 | 1,300 |
| Disintegrator | No | 1 | 400 | 400 |
| Total |  |  |  | 7,150 |

Production and Operation Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost/day | Pdn cost/ <br> month | Pdn Cost/ <br> Year1 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct costs3: | Kgs | 0.15 | 100 | 15 | 390 | 4,680 |
| Maize | Kgs | 0.15 | 100 | 15 | 390 | 4,680 |
| Wheat brand | 0.16 | 50 | 8 | 208 | 2,496 |  |
| Oiled rice <br> brand | Kgs |  |  |  |  |  |
| Molasses | Kgs | 0.75 | 50 | 37.5 | 975 | 11,700 |
| Groundnut <br> cake | kgs | 0.2 | 50 | 10 | 260 | 3,120 |
| Mineral <br> mixture | Kgs | 2 | 20 | 40 | 1,040 | 12,480 |
| Gunny bags | No | 0.1 | 200 | 20 | 520 | 6,240 |
| Subtotal |  |  |  |  | 3,783 | 45,396 |

## General Costs (Overheads)

| Labour | 300 | 3,600 |
| :--- | :--- | :--- |
| Utilities | 300 | 3,600 |
| Selling and Distribution | 100 | 1,200 |
| Administrative expenses | 150 | 1,800 |
| Shelter | 300 | 3,600 |
| Depreciation (Asset write off) Expenses | 149 | 1,788 |
| Sub-total | 1,299 | 15,588 |
| Total Operating Costs | 5,082 | 60,984 |

Production is assumed for 312 days per year.
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
A production Month is assumed to have 26 days.

Project Product Costs and Price Structure

| Item | Qty /day | Qty/yr | Unit /Cost | Pdn/yr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Animal <br> feed | 300 | 93,600 | 0.65 | 60,984 | 1.3 | 121,680 |
| TOTAL |  | 93,600 |  | 60,984 |  | 121,680 |

## Profitability Analysis Table

| Profitability Item | Per day | Per /Month | Per Year |
| :--- | :--- | :--- | :---: |
| Revenue | 390 | 10,140 | 121,680 |
| Less: Production <br> \&Operating Costs | 195.5 | 5,082 | 60,984 |
| Profit | 194.5 | 5,058 | 60,696 |

## Market Analysis

With agricultural modernization and diversification, there is a good future and solid potential for growth. Thus, market for animal feeds is guaranteed except the need for sensitization of the local population on the benefits of using animal feed visa vie natural grass and plants. The market cuts across farmers with different sizes of herds of animals.

## Agriculture Sector



## DOG BREEDING (GERMAN SHEPHERDS)

## Introduction

Dog breeding is the practice of mating selected specimens with the intent to maintain or produce specific qualities and characteristics. The German shepherd, from Germany was originally bred for herding and guarding sheep. Its origins date back to the 700's. The German shepherd Dog is also known by the other names of Alsatian and Deutscher Schaferhund. The advent of the two World Wars influenced the history of this dog.

## Production Capacity

This farm will be capable of producing 50 dogs in a period of six months.
Capital Investment Requirements and Equipment
This Farm will be operated locally on small scale, i.e. 50 shepherd Dogs kept on 2 acres of land. The Fixed Capital Investment required to start this project is US\$ 43,048 , the revenue potential is estimated at US\$ 218,400 with the net profit margin of $28 \%$. The payback period of this project is 2 years.

## Market Analysis

There is a high demand for German shepherd Dogs especially in schools, households, farms, and industries among others. However, they may also be exported.

## Project Costs

The projected costs of production are summarized in the Tables below:

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@ \$$ | Amount \$ |
| :--- | :--- | :--- | :--- | :--- |
| Land | Acres | 2 | 10,000 | 20,000 |
| German Puppies | No. | 50 | 150 | 7,500 |
| Field Van | No. | 1 | 5,000 | 5,000 |
| Tip Dishes | No. | 25 | 50 | 1,250 |
| Gas Cooker | No. | 1 | 500 | 500 |
| Puppy Pans | No. | 25 | 15 | 375 |
| Kennels | No. | 10 | 500 | 5,000 |
| Spraying Pump | No. | 5 | 30 | 150 |
| Injectors | No. | 5 | 6 | 30 |
| Spades \& Pangas | No. | 4 | 4 | 16 |
| Weighing Scale | No. | 2 | 100 | 200 |
| Water Basins | No. | 25 | 5 | 125 |
| Harmers | No. | 2 | 3 | 6 |
| Wheel Barrows | No. | 4 | 30 | 120 |
| Hand Hoe \& Rake | No. | 2 | 3 | 6 |
| Thermometers | No. | 2 | 10 | 20 |
| Water Tanks | No. | 2 | 100 | 200 |
| Dogs Beds | No. | 100 | 25 | 2,500 |
| Feeding Troughs | No. | 5 | 10 | 50 |
| Total Amount | 43,048 |  |  |  |
|  |  |  |  |  |

Operating Costs

| Item | Units | $@$ | Qty/ <br> day | Prod. <br> Cost/day | Prod. <br> Cost/month | Prod. <br> Cost/Year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Dog Food | Kgs | 0.8 | 50 | 40 | 1,040 | 12,480 |
|  <br> Medicine | M/gs/ <br> Litres | 20 | 5 | 100 | 2,600 | 31,200 |
| Water | Litres | 0.0013 | 50 | 0.065 | 1.69 | 20 |
| Sub total |  |  |  | 140.065 | 3,642 | 43,700 |

General Costs (Over heads)

| Labour | 300 | 3,600 |
| :--- | :--- | :--- |
| Repair \& Maintenance | 200 | 2,400 |
| Gas | 200 | 2,400 |
| Ropes | 10 | 120 |
| Fuel | 400 | 4,800 |
| Depreciation Expenses | 480 | 5,762 |
| Sub - total | 1,590 | 19,082 |
| Total Operating Costs | 5,232 | 62,782 |

Project Product Costs \& Price Structure

| Item | Qty/three <br> months | Qty/yr | @\$ | Pdn Cost/yrs | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Puppies | 50 | 15,600 | 4.02 | 62,782 | 14 | 218,400 |

Profitability Analysis

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 700 | 18,200 | 218,400 |
| Less: Production \& Operating Costs | 201.2 | 5,231 | 62,782 |
| Profit | 498.8 | 12,969 | 155,630 |
| Profit | 220 | 5,017 | 60,730 |

Production is assumed for 312 days per year.
Depreciation assumes $25 \%$ write off for all assets.
A production Month is assumed to have 26 days.

## Sources of Supply of Raw Materials:

Raw materials will be locally sourced from Farmers who have already invested in the sector, Animal Husbandry Research Organizations \& Centers in Uganda.
Government Facilities and Incentives Available:
The following incentives are available from Government in her bid to promote Agriculture: tax exemptions, basic infrastructure, and liberalized market.

## Agriculture Sector



## ESTABLISHING A COFFEE CAFFEINE PROCESSING PLANT

## Introduction

Caffeine is a drug that is naturally produced in the leaves and seeds of many plants. Coffee is quite popular as a leisure drink, and the ingredients of coffee include:caffeine, aroma, protein, tannic acid and fat etc.

The references show a small amount of caffeine can stimulate the brain and enhance memory while if caffeine is drunk too much, then it may trigger high blood pressure, kidney and coronary artery diseases, which are negative effects.

## Production Capacity

It is projected that this plant will produce 1 ton $(1,000 \mathrm{kgs})$ of Caffeine powder per day. The production cost is estimated at USD 300,886 , generating revenue potential of USD 655,200 per annum and a net profit margin of $54 \%$. The payback period for this project is 2 months.Production Process \& Technology

First, a grinder is used to crush coffee beans into a fine consistency and its filtered through a 40 mesh filter. When it reaches the operating temperature, a mixture of coffee powder and RO water is placed into the ultrasound machine, and then processed under various extraction conditions. The extracted liquid is initially filtered through a 40 mesh filter and collected. In order to achieve a ratio of liquid to water of 1:9 for a final dilution of 10 times, the extraction liquid is further filtered through a $0.45 \mu \mathrm{~m}$ filter paper. And then, the caffeine content is used as a base for comparative analysis of the HPLC.

## Market Analysis

There is soaring demand for caffeine-fueled energy drinks, which are especially popular among teens. And as it happens, energy drinks have become enormously popular as mixers with alcohol in bars.

## Project Costs:

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @\$ | Amount \$ |
| :--- | :--- | :--- | :--- | :--- |
| Truck | No. | 1 | 8,000 | 8,000 |
| Grinder | No. | 1 | 2,700 | 2,700 |
| Filter | No. | 1 | 50 | 50 |
| Water Baths | No. | 2 | 30 | 60 |
| Cleaning Equipment | No. | 1 | 500 | 500 |
| Furniture | No. | 2 | 30 | 60 |
| Weighing Scale | No. | 1 | 100 | 100 |
| Packaging Machine | No. | 1 | 1,000 | 1,000 |
| Total Amount |  |  |  | 12,470 |

Operating Cost in US\$

| Item | Units | @ \$ | Qty/day | Prod. <br> Cost/day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/ <br> Year[1] |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Coffee | Kgs | 0.75 | 1,112 | 834 | 21,684 | 260,208 |
| Sub total |  |  |  | 834 | 260,208 | 21,684 |

General Costs (Over heads)

| Rent | 500 | 6,000 |
| :--- | :--- | :--- |
| Labour | 500 | 6,000 |
| Utilities (Power \& Water) | 500 | 6,000 |
| Repair \& Maintenance | 500 | 6,000 |
| Packaging Materials | 130 | 1,560 |
| Fuel | 1000 | 12,000 |
| Depreciation(Asset write off) Expenses | 259.8 | 3,118 |
| Sub - total | 3,390 | 40,678 |
| Total Operating Costs | 25,074 | 300,886 |

Project Product Costs \& Price Structure

| Item | Qty/ day <br> $(\mathrm{mg})$ | Qty/yr | @ | Pdn Cost/ <br> yrS | UPx | Total/ <br> revenue |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Caffeine | 10,000 | $3,120,000$ | 0.1 | 300,886 | 0.2 | 655,200 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 2,100 | 54,600 | 655,200 |
| Less: Production \& Operating Costs | 964.3766 | 25,074 | 300,886 |
| Profit | 1,136 | 29,526 | 354,315 |

## Raw Material Availability

Raw materials are readily available in Uganda since there are many coffee growers.

## Government Facilities and Incentives Available

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

## Risk

The business risk involved is healthy and safety related, surrounding the manufacturing and processing but this can be solved by employing food scientists and adhering to a strict safety regime.

## Agriculture Sector



## ESTABLISHING A DAIRY FARM

## Introduction

Dairy farming is a class of agricultural, or 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 eventua 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, 1001trs of milk will be produced as each Dairy Animal is capable of producing 20 Litres of milk per day.

## 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\$ 73,521 , generating a revenue potential of USD 374,400 per annum. The net profit margin is $6 \%$ with a payback period of 2 years.

## Market Analysis

There is a high demand for dairy products in Urban Centers of Uganda especially in schools, hospitals, households, and Dairy processing industry. However, they may also be exported.

Capital Investment in US\$

| Capital Investment in USS |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Capital Investment Item | Units | Qty | @\$ | Amount \$ |
| Land | Acres | 5 | 12,000 | 60,000 |
| Cows | No. | 5 | 680 | 3,400 |
| Field Van | No. | 1 | 8,000 | 8,000 |
| Milk Cans | No. | 5 | 57 | 285 |
| Milk Filters | No. | 2 | 12 | 24 |
| Clamps | No. | 2 | 22 | 44 |
| Barns \& Shelters | No. | 2 | 545 | 1,090 |
| Spraying Pump | No. | 1 | 30 | 30 |
| Injectors | No. | 2 | 10 | 20 |
| Spades \& Pangas | No. | 4 | 3 | 12 |
| Weighing Scale | No. | 1 | 120 | 120 |
| Water Basins | No. | 5 | 12 | 60 |
| Harmer | No. | 1 | 5 | 5 |
| Wheel Barrows | No. | 2 | 35 | 70 |
| Hand Hoe \& Rake | No. | 2 | 3 | 6 |
| Thermometer | No. | 1 | 12 | 12 |
| Milk Cups | No. | 5 | 6 | 30 |
| Water Tanks | No. | 2 | 125 | 250 |
| Feeding Troughs | No. | 5 | 12.5 | 62.5 |
| Total Amount |  |  |  | 73,521 |

## Production and operation costs in US \$

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/Year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Direct Costs |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Feeds | Kgs | 0.78 | 500 | 390 | 10,140 | 121,680 |
| Drugs | M/gs | 21.5 | 5 | 107.5 | 2,795 | 33,540 |
| Calcium/ <br> Salt | Kgs | 0.6 | 10 | 6 | 156 | 1,872 |
| Water | Litres | 0.0028 | 600 | 1.68 | 43.7 | 524 |
| Sub total |  |  |  | 505.18 | 11,746 | 140,946 |

General Costs (Over heads)

| Labour | 300 | 3,600 |
| :--- | :--- | :--- |
| Repair \& Maintenance | 200 | 2,400 |
| Ropes | 10 | 120 |
| Fuel | 400 | 4,800 |
| Depreciation(Asset write off) Expenses | 36 | 437 |
| Sub - total | 946 | 11,357 |
| Total Operating Costs | 12,692 | 152,303 |

Project product costs and Price structure in US\$

| Item | Qty/day | Qty/yr | @S | Pdn Cost/yrs | UPx | Total /rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Milk | 3000 | 936,000 | 0.16 | 152,303 | 0.4 | 374,400 |

## Profitability Analysis table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 1,200 | 31,200 | 374,400 |
| Less: Production \& Operating Costs | 488 | 12,692 | 152,303 |
| Profit | 712 | 18,508 | 222,097 |

Sources of Supply of Raw Materials

## All raw materials and equipments are imported.

However, the business risk associated with it is a high potential of health and safety related risks surrounding the manufacturing and processing, perish ability of the products. But , this can be solved by employing food scientists and adhering to a strict safety regime.

## Agriculture Sector



## 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 300 m litres ( 1,400 ltrs) of canned juice can be produced a day.

## Production Technology \& Process

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

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 it is approximately 27,170 USD as shown in the table below:

Raw Material 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. The revenue per annum is USD 748,800, with an operating cost of USD 656,473 at a net profit of $12 \%$. The payback period is 4 months.

## Market Analysis

The demand for canned juice is very high in super markets, hotels and for export.; Foreign markets will constitute about $80 \%$ of the total market size.

## Project Costs:

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Delivery Van | No. | 1 | 11,200 | 11,200 |
| Juicer | No. | 1 | 3,200 | 3,200 |
| Gas Cooker | No. | 1 | 5,350 | 5,350 |
| Jar Lifter | No. | 1 | 1,350 | 1,350 |
| Cutting Board | No. | 1 | 58 | 58 |
| Timer | No. | 1 | 27 | 27 |
| Juice Tanks | No. | 3 | 55 | 165 |
| Boiler | No. | 1 | 535 | 535 |
| Furniture | No. | 5 | 37 | 185 |
| Packaging Machine | No. | 1 | 5,100 | 5,100 |
| Total Amount |  |  |  | 27,170 |

## Operating Costs in US\$

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/day | Prod. <br> Cost/mth | Prod. Cost/ <br> Year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Fruits | Kgs | 0.6 | 1000 | 600 | 15600 | 187200 |
| Flavours | Kgs | 1.5 | 100 | 150 | 3900 | 46800 |
| Food Colour | Kgs | 0.55 | 100 | 55 | 1430 | 17160 |
| Preservatives | Kgs | 6 | 100 | 600 | 15600 | 187200 |
| Sugar | Kgs | 2.5 | 200 | 500 | 13000 | 156000 |
| Water | Litre | 0.07 | 500 | 35 | 910 | 10920 |
| Sub total |  |  |  | 1,940 | 50,440 | 605,280 |

## General Costs (Over heads)

| 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 | 566 | 6,793 |
| Sub - total | 4,266 | 51,193 |
| Total Operating Costs | 54,706 | 656,473 |

Project Product Costs \& Price Structure in US

| Item | Qty/day | Qty/yr | @\$ | Pdn Cost/yrs | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Canned <br> Juice | 1200 | 374,400 | 1.75 | 656,473 | 2 | 748,800 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 2,400 | 62,400 | 748,800 |
| Less: Production \& Operating Costs | 2,104 | 54,706 | 656,473 |
| Profit | 296 | 7,694 | 92,328 |

## Sources of Supply of 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.

Government Facilities and Incentives Available:
These incentives are available from the Government in her bid to promote Industrialization and Agro-Processing: tax exemptions, land, transport and communication facilities.

## Agriculture Sector



## MAKING VERMI-COMPOST

## Introduction

The importance of Vermi-compost, which is eco-friendly, has increased in recent years, as it is chemical free manure. The increase in the demand for fertilizers has also inadvertently led to the increase in demand for vermi-compost. The business risk is that some worms can easily die and some organic waste can be harmful to the soil texture, however, this can mitigated by applying Vermicomposting technology. It costs US $\$ 3,680$ with estimated revenue of US $\$ 11,482$, with net profit margin of $8 \%$. The payback period is 3 years.

## Production, Capacity and Technology

The organic waste is pasteurized and kept in the composing tanks with earthworms dumped into it. The earthworms multiply in due course and the soil converts into compost, referred to as Vermi compost. Soil is to be excavated in the four catcher sheds up to a depth of about one foot for preparing the beds, which contain organic waste, Vermi castings and cow dung. The length and width of the beds is 100 ft . and 5 ft . respectively.

Some paddy straw should be spread evenly at the bottom of the excavations. Charging of waste and cow dung slurry should be continued till the heap of material is one foot above the ground level. The profile project has a minimum capacity of producing 300kg per month of Vermi-compost.

## Capital Investment Requirement in US \$

| Item | Units | Qty | Price | Total |
| :--- | :--- | :--- | :--- | :--- |
| Power driven chaffer cutter | No | 1 | 530 | 530 |
| Weighing machine platform type | No | 1 | 150 | 150 |
| Water pump\& pipes for sprinkling | No | 1 | 1,300 | 1300 |
| Tools \& implements | No | 1 | 1,700 | 1700 |
| Total Cost of Machinery \& Tools |  |  |  | 3,680 |

## Production and Operation costs

## Direct materials, supplies and costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost// <br> day | Pdn cost// <br> month | Pdn <br> cost/yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Cow dung <br> manure | kg | 0.25 | 12.8 | 3.205 | 83.33 | 999.96 |
| Vermi castings | kgs | 8.2 | 0.16 | 1.312 | 34.112 | 409.3 |
| Biodegradable <br> manure | kgs | 0.06 | 5 | 0.3 | 7.8 | 93.6 |
| Sub-total |  |  |  | 4.8 | 125.2 | 1502.9 |

## General Costs (Overheads)

| Labour | 300 | 3,600 |
| :--- | :---: | :---: |
| Selling \& distribution | 50 | 600 |
| Utilities (Water, power) | 200 | 2,400 |


| Rent | 25 | 300 |
| :--- | :---: | :---: |
| Miscellaneous expenses | 100 | 1,200 |
| Depreciation | 77 | 920 |
| Sub-total | 752 | 9,020 |
| Total Operating Costs | 877 | 10,523 |

1. Production costs assumed are for 312 days per year with daily capacity of 11.5 kgs
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at $25 \%$ per year for all assets.
3. Currency used is US Dollars.
4. A production month is assumed to have 26 days

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

| Item | Qty/day | Qty/year | Unit cost | Pdn cost/yr | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Compost <br> manure | 11.5 | 3,588 | 2.9 | 10,523 | 3.2 | 11,482 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 37 | 956.8 | 11,482 |
| Less: Production and operating costs | 34 | 877 | 10,523 |
| Profit | 3 | 80 | 959 |

## Market

The Vermi compost, an eco-friendly technology has gained popularity in urban as well as rural areas to preserve the environment. The other potential market is from the flower growers who are growing tremendously.

## Suppliers of Plant and machinery

All that is required is available in Uganda and is in most cases not hard to come by.

## Government incentive

The government so far does not tax farmers save for the large scale ones who fall in the income tax bracket.

## Agriculture Sector



## VERMI-CULTURE

## Introduction

Vermiculture: "The raising and production of earthworms and worm castings" In recent years, thanks to the growing awareness, the benefits of organic compost have been understood, and today, more and more farmers want organic compost as it enhances the soil fertility and regenerates micro organisms in the soil.

This idea is associated with risks of harmful organic waste to the soil, however, this can be mitigated by applying Vermi-culturing technology. Project cost is US\$ 7,640, revenue is estimated at US $\$ 29,063$ from production of 360 kgs of worms, which are used as baits in the fishing sector, cocoons and residues annually. The net profit margin is estimated at $3 \%$ with a payback period of 3 years.

## Production Process, Capacity and Technology

Much similar to the process of making vermi-compost, this involves breeding of earthworms in a mixture of cow dung and agricultural wastes to make organic compost manure. The profiled project has a minimum capacity of 30 kg per month and this, among others is on the basis of 26 working days in a month and single 8 -hour work shifts in each working day.

## Capital Investment Requirement in US \$

Capital Investment Requirement in US S

| Item | Units | Qty | Price | Total |
| :--- | :---: | :---: | :---: | :---: |
| Compost turning equipment | No | 1 | 1,200 | 1,200 |
| Screening equipment | No | 1 | 1,700 | 1,700 |
| Green waste picking station | No | 2 | 870 | 1,740 |
| Sieves of 3mm | No | 2 | 1,500 | 3,000 |
| TC of tools |  |  |  | 7,640 |

## Production and Operation costs in US\$

Direct materials, supplies and costs

| Cost Item | Units | Qty/ <br> day | Pdn <br> cost/day | Pdn cost/ <br> month | Pdn cost/ <br> year |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Cow dung | kgs | 0.2 | 12.8 | 2.56 | 66.664 | 799.96 |
| Earth worms | kgs | 8.2 | 0.16 | 1.312 | 34.112 | 409.34 |
| Agricultural <br> residue. | kgs | 0.07 | 5 | 0.35 | 9.1 | 109.2 |
| Sub-total |  |  |  | 4.23 | 110 | 1319 |

## General Costs (Overheads)

| Labour | 1,650 | 19,800 |
| :--- | :--- | :--- |
| Selling \& distribution | 100 | 1,200 |
| Utilities (Water, power) | 200 | 2,400 |
| Rent | 25 | 300 |
| Miscellaneous expenses | 100 | 1,200 |
| Depreciation | 159 | 1,910 |
| Sub-total | 2,234 | 26,810 |
| Total Operating Costs | 2,344 | 28,129 |

1. Production costs assumed are for 312 days per year with daily capacity of 1.15 kgs
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off a 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

| Item | Qty/day | Qty/ <br> year | Unit <br> Cost | Pdn cost/ <br> yr | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Worms | 1.15 | 359 | 78 | 28,129 | 81 | 29,063 |

## Profitability Analysis in US\$

## Market

| Profitability Item | Per day | Per month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 94 | 2,422 | 29,063 |
| Less: Production and operating costs | 90 | 2,344 | 28,129 |
| Profit | 3 | 78 | 934 |

Thanks to the awareness in rural areas, the demand for Vermicompost is growing supported by an increase in the number of commercial establishments especially in market gardening and flower farmers.

## Suppliers of Equipment and Materials

All the equipment needed for this project is available in Uganda and at a cheap price. Tonet Ltd, Kanyanya, Gayaza. Worms can be got from Kawanda or Namulonge research centers.

## Agriculture Sector

## MAKING ICE CANDY

## Introduction

The business idea is for the production and marketing of ice candies. Ice Candy is made out of frozen juice or fruits in little ice bags where one would have to nibble at the end of the plastic to sip or bite the ice candy. The business risk involved is healthy and safety related risks surrounding the manufacturing and processing However, this is can be solved by employing food scientists.

The total investment is estimated at US $\$ 3,230$ with production capacity of 15,000 ice candies per day. The total revenue is estimated at US\$ 936,000 per year. The net profit margin is $26 \%$ for this business idea.

## Production process

To make an ice candy, one needs to have ice candy bags, funnel and fresh fruits or juices, depending on the Ice Candy flavor you wish to make. The required quantity of water is taken into the container. Colours, fresh fruits and juices are mixed thoroughly and filled in candy blocks. Bamboo sticks are inserted into candy holes and placed in a freezer for solidification. After cooling, they are removed and placed in a cold chamber.

## Capital investment in US\$

| Capital investment item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Ice candy machine | No. | 1 | 1,700 | 1,700 |
| Defreezer | No. | 1 | 1,100 | 1,100 |
| Electrical motor | No. | 1 | 400 | 400 |
| Packaging materials (kg) | No. | 10 | 3 | 30 |
| Total cost of machinery |  |  |  | 3,230 |

## Production and operating costs in US $\mathbf{\$}$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Colours, fruits, <br> Sugar | kg | 62 | 35 | 2,170 | 56,420 | 677,040 |
| Sub-total |  |  | 35 | 2,170 | 56,420 | 677,040 |

## General costs(overheads)

| Utilities(water and power) | 50 | 600 |
| :--- | :--- | :--- |
| Labour | 75 | 900 |
| Rent | 75 | 900 |
| Miscellaneous costs | 50 | 600 |
| Distribution costs | 260 | 3120 |
| Depreciation(Asset write off)Expenses) | 67 | 808 |
| Sub -total | 577 | 6928 |
| Total Operating Costs | 56,997 | 683,968 |

packets of ice candies
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

| Item | Qty /day | Qty/yr | @ | Pdn cost/yr | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ice <br> candies | 15,000 | $4,680,000$ | 0.14 | 683,968 | 0.2 | 936,000 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 3,000 | 78,000 | 936,000 |
| Less production and <br> operating Costs | 2,192 | 56,997 | 683,968 |
| Profit | 808 | 21,003 | 252,033 |

## Market Analysis

Ice candy is consumed by all sections of society particularly children. The market for ice candy is good especially in primary schools.

## Sources of Raw Materials and Equipment;

Raw materials and equipments can be purchased from the loca market.

## Government Facilities and Incentives

The government has come out to encourage industrialists through being very liberal in her policies. Facilitation is extended to them through organizations like Private Sector Foundation Uganda; an initiative that encourages investors.

## Agriculture Sector



## SERICULTURE

## Introduction

This business idea is for sericulture. Sericulture is the rearing of silkworms for silk. It is a major income generating activity based on cocoons cultivation in rural areas. However, there is high risk of death of some silkworms, which can be managed by employing high disease resistant and high yielding strain of mulberry silk worms. The business idea aims at production of 31,200 yarns of silk annually. The revenue potential is estimated at US $\$ 93,600$ annually. The total capital investment cost for the project is US $\$ 14,718$. The net profit is at $36 \%$ in a payback period of 1 year and 6 months.

## Production Capacity

The envisaged project is production of 31,200 yarns of silk annually.

## Technology and Processes Description

The technology needed is as in the table for fixed capital investment requirements below. The raw materials include silk worms and mulberry leaves. Silk worms are reared in trays in rooms with controlled and humid temperatures and regularly fed on mulberry leaves. At a certain stage the silkworms convert themselves into
cocoons. These cocoons are made from a single filament of materia secreted by the pupa and wrapped around itself for protection. These filaments upon hardening constitute silk. Reeling is then done by first cooking them in water to remove the gum, which holds it together, and then unwinding the filaments. Prior to weaving, the raw silk is boiled in water to remove the remaining gum, dyed and bleached, and then woven into the garment usually on a handloom.

## Capital Investment Requirements

| Capital Investment Item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Trays |  | 10 | 70 | 700 |
| Stands |  | 100 | 45 | 4500 |
| Feeding Stands |  | 50 | 16 | 800 |
| Leaf chambers |  | 50 | 31.5 | 1575 |
| Leaf chopping boards |  | 5 | 70 | 350 |
| Thermometers |  | 10 | 60 | 600 |
| Hygrometers |  | 10 | 35 | 350 |
| Foot operated sprayers |  | 1 | 3245 | 3245 |
| Mats | No |  |  | 332 |
| Reeling machine | No | 1 | 250 | 250 |
| Hand looms | No |  |  | 266 |
| Twisting machine |  | 1 | 1100 | 1,100 |
| Warping machine | No | 1 | 650 | 650 |
| Total |  |  |  | 14,718 |

## Production and Operating Expenses

| Cost Item | Units | @/day | Qty/ <br> day | Pdn <br> Cost/day | Pdn Cost// <br> month | Pdn Cost/ <br> Year1 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct costs |  |  |  |  |  |  |
| Mulberry <br> Leaves | Kgs | 1.5 | 50 | 75 | 1,950 | 23,400 |
| Medicine | Ltrs | 9 | 1 | 9 | 234 | 2,808 |
| Packaging <br> Materials | Pieces | 0.26 | 3 | 0.78 | 20 | 243 |
| Sub-total |  |  |  |  | 2,204 | 26,451 |

General costs (Overheads)

| Labour | 700 | 8,400 |
| :--- | :---: | :---: |
| Utilities | 700 | 8,400 |
| Selling and Distribution | 200 | 2,400 |
| Administrative expenses | 200 | 2,400 |
| Shelter | 700 | 8,400 |
| Depreciation (Asset write off) Expenses | 307 | 3,680 |
| Sub-total | 2,807 | 33,680 |
| Total Operating Costs | 5,011 | 60,131 |

Production is assumed for 312 days per year.
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
A production Month is assumed to have 26 days.

Project Product Costs and Price Structure

| Item | Qty /day | Qty/yr | @ | Pdn/ yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Silk | 100 | 31,200 | 2 | 60,131 | 3 | 93,600 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 300 | 7,800 | 93,600 |
| Less: Production \& Operating Costs | 193 | 5,011 | 60,131 |
| Profit | 107 | 2,789 | 33,469 |

## Sources of supply of Equipments

All equipments and raw materials needed can be got in Uganda from Bushenyi.

## Market analysis

The market for sericulture is assured both in rural and urban areas. There is tremendous market in Uganda especially with the growth of the textile sector. Government facilities

Farming costs 20\% farm work, labour quarters, immovable buildings, other necessities for the farm. A silk processing factory is available in Mbarara. The NAADS and the prosperity for all programmes can consume products from this project.

## Agriculture Sector



## MAKING POWDER MILK

## Introduction

This business idea is for the production and marketing of powder milk. The business idea is premised on the production of 52,000 kg of powder milk per month, which translates into $624,000 \mathrm{~kg}$ per year. The revenue potential is estimated at US $\$ 208,000$ per month, which translates into US\$ $2,496,000$ per year. The project cost is US $\$ 82,373$ and the payback period of this project is 2 months.

## Production Process

Milk bubbles are sprayed in hot air for $3-30$ seconds. The water particles from the milk get evaporated and remain as powder. As this happens in fractions of time, the healthy particles of milk are protected.

## Tools and Equipment in US\$

| Item | Unit | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Auto mixer | No. | 1 | 10,000 | 10,000 |
| lactoscan | No. | 1 | 223 | 223 |
| Packing machine | No. | 1 | 9,500 | 9,500 |
| storage containers | No. | 2 | 300 | 600 |
| Milk sampler | No. | 1 | 50 | 50 |
| Milk reception unit | No. | 1 | 10,000 | 10,000 |
| Delivery van | No. | 2 | 26,000 | 52,000 |
| Total Cost of Machinery |  |  |  | 82,373 |

## Production and Operating Costs in US \$

Direct Materials, Supplies and Costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Prod. <br> cost/ day | Prod. Cost/ <br> month | Prod. <br> cost/ year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Milk | Ltrs | 0.48 | 20,000 | 9,600 | 249,600 | $2,995,200$ |
| Packaging <br> materials | ctn | 0.3 | 10 | 3 | 78 | 936 |
| Sub-total |  |  |  |  | 249,678 | $2,996,136$ |

## General costs (Overheads)

| Utilities (power) | 300 | 3,600 |
| :--- | :--- | :--- |
| Utilities (water) | 200 | 2,400 |
| Fuel | 1,500 | 18,000 |
| Salaries | 2,500 | 30,000 |
| Rent | 1,000 | 12,000 |
| Depreciation (Assets write off) Expenses | 1716 | 20,593 |
| Sub-total | 7,216 | 86,593 |
| Total Operating costs | 256,894 | $3,082,729$ |

Production assumed 312 days per year with a daily capacity of 20,000 Liters of powder milk.
Depreciation (fixed assets write off) assumes 4 years life of assets write off at $25 \%$ per year for the delivery vans.
Direct costs include materials, supplies and other costs that directly go into production of the product.

## Product Cost and Price Structure in US\$

| Item | Qty/ <br> day | Qty/ <br> year | @ | Prod. Cost/ <br> year | UPx | Total <br> Revenue |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Powder milk | 2,000 | 624,000 | 4.9 | $3,082,729$ | 5 | $3,120,000$ |
|  |  |  |  | $3,082,729$ |  | $2,496,000$ |

## Profitability Analysis in US\$

| Profitability item | per day | per month | per year |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Revenue | 10,000 | 260,000 | $3,120,000$ |
| Powder milk | 9,881 | 256,894 | $3,082,729$ |
| Less Production \& Operating <br> Costs | 119 | 3,106 | 37,271 |
| Profit |  |  |  |

## Government Incentive

Government is supporting dairy farmers through funding the sector and has scrapped taxes on dairy products.

## Market

Milk products are consumed countrywide. There is a ready market for dairy products in Uganda.

## Suppliers of Plant and Machinery

Snowman's Centre Plot 89, 7th street, Industrial Area. KampalaUganda. Tel: +256-414-251800, +256-414237104 0312264786 . E-mail: admin@snowmansgroup.com

## Agriculture Sector



## MAKING DECORTICATED CASHEWNUT

## Introduction

This business idea is for production and marketing of edible cashew nuts, the business idea is premised on production of $5,200 \mathrm{kgs}$ of cashew nuts per month, which translates into 62,400 per year. The revenue potential is estimated at US $\$ 6,500$ per month, translating into 78,000 per year.

The project cost is US $\$ 27,254$ with the net profit of $28 \%$ and payback period of 3 years and 5 months.

## Production Process

In the mechanized system, the raw cashew nuts are decorticated using a hand operated machine, mounted on a work table. The decorticator splits the nut when placed between two horizontally mounted blades, especially spread to suit the contour of the raw nut. The outer shell is conveniently split by the sliding and splitting action of blades. An operator can process $25-30 \mathrm{~kg}$ nuts per day.

## Production Capacity

The plant can have a capacity of 9000 kgs per year

## Land Requirement

Rent for a year would cost about 1,200 US Dollars
Capital Investment Requirements In USD

| Item | Unit | Quantity | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Cashew Decorticator | No. | 1 | 1,154 | 1,154 |
| Other equipments | No. | 1 | 100 | 100 |
| Delivery van | No. | 1 | 28,000 | 26,000 |
| TC of Machinery |  |  |  | 27,254 |

## Production and Operating Costs in US \$

## Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Prod. <br> cost/ day | Prod. Cost/ <br> month | Prod. <br> Cost/ year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cashew nuts | Kgs | 0.5 | 300 | 150 | 3,900 | 46,800 |
| Sub-total |  |  |  |  | 3,900 | 46,800 |

## General costs (Overheads)

| Utilities (power) | 15 | 180 |
| :--- | :--- | :--- |
| Utilities (water) | 15 | 180 |
| Salaries | 60 | 720 |
| Rent | 75 | 900 |
| Depreciation (Assets write off) Expenses | 567.8 | 6813.5 |
| Sub-total | 732.8 | 8,794 |
| Total Operating Costs | 4,633 | 55,594 |

Production costs assumed 312 days per year with a daily capacity of 200 kgs of cashew nuts.
Depreciation (fixed assets write off) assumes 4 years life of assets write off of $25 \%$ per year for all assets.
Direct costs include: materials, supplies and other costs that directly go into production of the product.

Project Product Cost and Price Structure in US\$

| Item | Qty/ day | Qty/yr | @ | Prod. Cost <br> /year | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Decorticated <br> cashew nuts | 200 | 62,400 | 0.9 | 55,594 | 1.3 | 78,000 |

## Profitability Analysis in US\$

| Profitability item | per day | per month | per year |  |
| :--- | :--- | :--- | :--- | :---: |
| Revenue |  |  |  |  |
| Cashew nuts | 250 | 6,500 | 78,000 |  |
|  <br> Operating Costs | 178 | 4,633 | 55,594 |  |
| Profit | 72 | 1,867 | 22,407 |  |

## Market

Cashew nuts are highly demanded on the world market. A small local market also exists although cashew nuts are not very common in Uganda. This could turn out to be the turning factor in the marketing of cashew nuts as they have an open market, with limited competition.

## Government Incentives

Government is encouraging small scale business that would provide employment to natives by giving them funds, subsidies and land.

## Equipment Suppliers

Equipment can be imported from Asia and Europe.

## Agriculture Sector

## BUSINESS IDEA FOR MAKING COCONUT CREAM

## Introduction

This business idea is for production and marketing of coconut cream. The business idea is based on production of $74,984 \mathrm{kgs} \mathrm{per}$ month, which translates into $899,809 \mathrm{~kg}$ per annum. The revenue potential is estimated at US $\$ 393,666$ per month translating into US $\$ 4,723,992$ per year with a sales margin of $25.4 \%$. Total investment requirement is US $\$ 27,270$ for the first year of project operation.

## Production Process

The first step is breaking the dehisced nuts into halves. The split nuts are deshelled to separate the kernel. These two operations are usually done manually. Kernel is washed and then blanched by immersing it in hot water at $80^{\circ} \mathrm{C}$ for 10 minutes. The next step is comminution of kernel into small gratings using a hammer mill. The gratings are subjected to pressing using continuous screw press to extract the milk.

The coconut milk obtained is filtered by passing through a vibratory screen. Food additives such as emulsifiers and stabilizers are to be added to the milk to obtain a stable consistency and texture. For this purpose, permitted emulsifiers and stabilizers are mixed with hot water separately and mixed thoroughly. This is added to the coconut milk and then subjected to emulsification using a mechanical impeller emulsifier. The cans are then cooled in running water.

## Capital Investment Requirement in US\$

| Capital Investment Item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Hammer mill | No | 1 | 1,250 | 1,250 |
| Elevator | No | 1 | 1,200 | 1,200 |
| Screw Press | No | 1 | 250 | 250 |
| Coconut milk storage tanks | No | 2 | 750 | 1,500 |
| Vibrating sieving machine | No | 1 | 550 | 550 |
| Coconut residue mixer | No | 1 | 2,500 | 2,500 |
| Additive mixing tank | No | 1 | 2,300 | 2,300 |
| Emulsifier | No | 1 | 500 | 500 |
| Homogenizer | No | 1 | 1,400 | 1,400 |
| Pasteurizer | No | 1 | 480 | 480 |
| Volumetric filling machine | No | 1 | 800 | 800 |
| Exhaust box | No | 4 | 60 | 240 |
| Can sealing machine | No | 1 | 500 | 500 |
| Agro waste Vertical boiler | No | 4 | 300 | 1,200 |
| Sterilization tank | No | 1 | 500 | 500 |
| Coconut residue storage bins | No | 4 | 400 | 1,600 |
| Land(1 acre) | Piece | 1 | 3,000 | 3,000 |
| Delivery van | No | 1 | 7,500 | 7,500 |
| Total |  |  |  | 27,270 |
|  |  |  |  |  |

## Production and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Coconuts | No | 0.94 | 11,538 | 10,846 | 281,989 | $3,383,865$ |
| Flavor | kg | 1 | 200 | 200 | 5,200 | 62,400 |


| Fat | kg | 0.62 | 150 | 93 | 2,418 | 29,016 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Protein | kg | 0.7 | 50 | 35 | 910 | 10,920 |
| Sugars | kg | 1 | 70 | 70 | 1,820 | 21,840 |
| Water | Itrs | 0.004 | 2,000 | 8 | 208 | 2,496 |
| Pack <br> materials | No | 0.19 | 3,000 | 570 | 14,820 | 177,840 |
| Sub-total |  |  | 17,008 | 11,822 | 307,365 | $3,688,377$ |

## General Costs(Overheads)

| Labour | 5,750 | 69,000 |
| :--- | :--- | :--- |
| Utilities | 100 | 1,200 |
| Preliminary costs | 250 | 3,000 |
| Miscellaneous | 100 | 1,200 |
| Depreciation(Asset write off) Exp | 568 | 6,818 |
| Sub-total | 6,768 | 81,218 |
| Total Operating Costs | 314,133 | $3,769,594$ |

Project Product Costs and Price Structure in US\$

| Item | Qty/day | Qty/Yr | @ | Pdn cost/Vr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Coconut Cream | 2,884 | 899,808 | 4.1 | $3,769,594$ | 5.2 | $4,723,992$ |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 15,141 | 393,666 | $4,723,992$ |
| Less: Production and Operating Costs | 12,082 | 314,133 | $3,769,594$ |
| Profit | 3,059 | 79,533 | 954,398 |

## Market Analysis

Coconut cream has a wide market structure because it can be used in many industries like the bakery/confectionary industry, chocolate industry and sweets. It can also be exported.

## Availability of Raw Materials and Equipments

Raw materials can be procured locally from Kalangala District while equipments can be imported from China and Japan

## Agriculture Sector



## CREAM SEPARATION PLANT

## Introduction

Cream is a fat concentrate found in milk used in the manufacturing of butter and in making bakery products. Cream separation can turn out to be a very lucrative business.

The plant can be set up in rural areas as long as utilities like electricity are available. The business idea aims at production of 150 liters of cream per day, which translates into 46,800 litres annually. The Profit is estimated at $\$ 16,080$ annually with a net profit $37 \%$ and the payback period is expected to be 3 years 7 months the total capital investment for the project is $\$ 17,400$.

## Technology and production process

The equipments used include a cream separator, milk and cream tanks. The process of separation of cream from, milk is done by a cream separator. In the process of cream separation, the fat-rich portion is separated from the milk by a centrifugal action and collected separately through different outlets. The milk is put into the cream separator and the cream is automatically separated.

## Capital Investment Requirements

| Capital Investment Item | Unit | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Milk Cream Separator | No | 1 | 1,000 | 1,000 |
| Cream Tanks | No | 2 | 350 | 700 |
| Milk Tanks | No | 2 | 350 | 700 |
| Building | No | 1 | 15000 | 15,000 |
| Total |  |  |  | 17,400 |

Production and Operating Expenses

| Cost Item | Units | @/day | Qty/ <br> day | Pdn Cost/ <br> day | Pdn Cost// <br> month | Production <br> Cost/Year1 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct costs3: <br> Milk Litres | 0.4 | 150 | 60 | 1560 | 18,720 |  |
| Sub-total |  |  |  |  |  |  |

## General costs (Overheads)

| Labour | 250 | 3,000 |
| :--- | :---: | :---: |
| Utilities (Water and Electricity) | 333 | 4,000 |
| Selling and Distribution | 41.67 | 500 |
| Administrative expenses | 12.5 | 150 |

## Depreciation (Asset write off) Expenses

| Plant and Machinery | 53 | 600 |
| :--- | :---: | :---: |
| Building | 312.5 | 3750 |
| Sub-total | 1003 | 12,000 |
| Total Operating Costs | 2,563 | 30,720 |

Production is assumed for 312 days per year.
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for al assets.
A production Month is assumed to have 26 days.

## Project Production Costs and Price Structure

| Item | Qty /day | Qty/yr | @ | Pdn cost/yr(\$) | UPX | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cream | 150 | 46,800 | 0.7 | 30,720 | 1 | 46,800 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 150 | 3,900 | 46,800 |
| Less: Production and Operating Costs | 98 | 2,560 | 30,720 |
| Profit | 52 | 1,340 | 16,080 |

## Market Analysis

The cream is used in topping cakes, pastries and soups etc Therefore, this product has good demand both in urban and rural areas. Supply for bakeries and confectioneries, is recommended for the product to capture a portion of the market.

## Sources of supply of equipment

Milk can be got from: Mbarara, Kyenjojo, and Ngoma and Nakasongola districts. The machinery can be imported from USA.

## Government Facilities and Incentives

The government is encouraging any value added agricultural produce.

## Agriculture Sector



## BAKING BISCUITS

## Introduction

This business idea is for the production and marketing of biscuits. Biscuits are confectionary products and they refer to small thin products of varying shapes, tastes that are of soft brittle texture.

They are referred to by different names in different countries. The revenue is estimated at US $\$ 1,404,000$ per year. The payback period is really short i.e. 2 months and net profit for this investment is 92\%.

## Production process

The process consists of combining wheat flour, sugar, margarine, milk and water in a dough mixer. The dough is then mixed with baking powder and kept for around three hours. The prepared dough is then passed through biscuit molding, stamping, and cutting machines and finally baked in an oven. The biscuits are then cooled,
sorted and packed neatly.

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Brick oven | No. | 1 | 2,500 | 2,500 |
| Dough mixer | No. | 1 | 1,750 | 1,750 |
| Weighing scale | No. | 2 | 75 | 150 |
| Tray (pieces) | No. | 5 | 10 | 50 |
| a | No. | 1 | 50 | 50 |
| Baking trays | No. | 50 | 15 | 750 |
| Packing materials (kg) | No. | 200 | 1.5 | 300 |
| Van | No. | 1 | 26,000 | 26,000 |
| TCs on Machinery | 31,550 |  |  |  |

Production and Operating costs in US\$

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> month | Pdn cost <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Wheat <br> flour | kg | 2 | 20 | 40 | 1,040 | 12,480 |
| Sugar | kg | 1.2 | 50 | 60 | 1,560 | 18,720 |
| Cooking oil | Ltrs | 2 | 40 | 80 | 2,080 | 24,960 |
| Firewood | tone | 13.5 | 3 | 41 | 1,053 | 12,636 |
| Margarine | kg | 4.8 | 12 | 57.6 | 1,498 | 17,971 |
| Non fat <br> milk <br> powder | kg | 2.5 | 30 | 75 | 1,950 | 23,400 |
| Salt | kg | 0.2 | 5 | 1 | 26 | 312 |
| Sub-total |  |  |  | 354 | 9,207 | 110,479 |

## General costs(overheads)

| Utilities(water and power) | 50 | 600 |
| :--- | :--- | :--- |
| Labour | 50 | 600 |
| Rent | 125 | 1,500 |
| Miscellaneous costs | 50 | 600 |
| Depreciation(Asset (write off)Expenses) | 657 | 7,888 |
| Sub -total | 932 | 11,188 |


| Total Operating Costs | 10,139 | 121,667 |
| :--- | :--- | :--- |

Production costs assumed 312 days per year with a daily capacity of 9000 biscuits
Depreciation (fixed assets write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets
Direct costs include materials, supplies and other costs that directly go into production of the product.

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

| Item | Qty /day | Qty/yr | $@$ | Pdtn cost/yr | UPx | TR |
| :--- | :--- | :--- | :---: | :--- | :--- | :--- |
| Biscuits | 9,000 | $2,808,000$ | 0.04 | 121,667 | 0.5 | $1,404,000$ |

## Profitability Analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 4,500 | 117,000 | $1,404,000$ |
| Less production and operating Costs | 390 | 10,139 | 121,667 |
| Profits | 4,110 | 106,861 | $1,282,333$ |

## Market Analysis

Biscuits are delicious to children and therefore have a ready market. Schools, shops, street vending and market places, supermarkets are potential buyers.

## Sources of raw materials:

Raw materials are locally available.

## Government Facilities and Incentives

The government maintains favorable tax policies for industrialists. They are represented in the formulation of policies on trade and forward their input to the budget through their representatives.

## Agriculture Sector



## BUSINESS IDEA FOR ESSENTIAL OIL PRODUCTION

## Introduction

This project is for extraction of oil from various oil bearing plants and grasses such as: Eucalyptus, cinnamon ginger, lemons neto etc. Essential oil is highly volatile and is essentially carried away by steam without undergoing decomposition. Essential oils are produced for use in medicine and perfume manufacture, and for other industrial purposes.

The project requires an estimated fixed capital of US $\$ 28,700$ and operating costs of US\$288,803 generating TR of US\$ 505,440 in the first year of operation.

## Production Process and Capacity

The leaves are stacked in the extractor and the boiler pressure is maintained at 40 pai and distilling may vary from 3 hrs to 18 hours depending on the species being distilled. The leaves are subjected to the steam and oil is extracted as it goes up in the steam. Water is separated through fractional distillation. If eucalyptus leaves are used, 80 kgs of oil would be expected to be generated from one hectare. Oil yield may vary from plant to plant or from stuff used such as lemons.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | total |
| :--- | :---: | :---: | :---: | :---: |
| Fractional Distillation with <br> Condenser | No | 1 | 5,000 | 5,000 |
| Steam generating tank | No | 1 | 12,000 | 12,000 |
| Truck (3-tone) | No | 1 | 8,000 | 8,000 |
| Laboratory equipment | No | 1 | 2,500 | 2,500 |
| Other tools | No | - | - | 200 |
| Furniture \& Fittings | No | - | - | 1,000 |
| Total |  |  |  | 28,700 |

## Production and Operating Costs in US\$

(a)Direct materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn Cost/ <br> day | Pdn Cost// <br> mth | Pdn <br> Cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs <br> Fresh <br> Leaves and <br> twigs | Tones | 650 | 1 | 650 | 16,900 | 202,800 |
| Water | Ltrs | 0.004 | 3,000 | 12 | 312 | 3,744 |
| Packaging <br> materials | Pcs | 1.5 | 64 | 96 | 2,496 | 29,952 |
| Sub-total |  |  | 3,065 | 758 | 19,708 | 236,496 |

## General Costs (Overheads)

| Rent | 500 | 6,000 |
| :--- | :---: | :---: |
| Labour | 2,050 | 24,600 |
| Selling and Distribution | 369 | 4,428 |
| Cleaning and Toiletries | 63 | 756 |
| Utilities | 529 | 6,348 |
| Miscellaneous | 250 | 3,000 |
| Depreciation | 598 | 7,175 |
| Sub-total | 4,359 | 52,307 |
| Total Operating Costs | 24,067 | 288,803 |

1. Production costs assumed 312 days per year with daily capacity of producing 600 litres of essential oil.
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. Total monthly days assumed are 26 -days
5. The valuation currency used is United States Dollars.

## Market Analysis

Essential oil is a vital item in pharmaceutical and perfume manufacture; as well as other industrial uses. The industrial development in the country is a healthy atmosphere for this project as it guarantees the market. There is great potential for export to the highly industrialized world.

## Project Product costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> Cost/ <br> yr | UPx | Total <br> Rve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Essential Oil | 600 | 187,200 | 1.5 | 288,803 | 2.7 | 505,440 |

## Profitability Analysis Table in US\$

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,620 | 42,120 | 505,440 |
| Less: Production and Operating <br> Costs | 925.7 | 24,067 | 288,803 |
| Profit | 694 | 18,053 | 216,637 |

## Government Facilities and Incentives

There are no taxes imposed on exports and any VAT input is claimed and reimbursed by the tax body as a way of encouraging and facilitating exporters.

## Agriculture Sector



## NEEM OIL EXTRACTION

## Introduction

Neem oil is a vegetable oil pressed from the fruits and seeds of neem , an evergreen tree which is endemic to the Indian subcontinent and has been introduced to many other areas in the tropics. It is perhaps the most important of the commercially available products of neem for organic farming and medicines. The business idea aims at production of 200 Litres of neem oil per day thus 62,400 litres annually. The revenue potential is estimated at US $\$ 561,600$ annually with a total capital investment of US $\$ 6928$. The project is also estimated to yield a net profit of $10 \%$

## Plant Capacity

The plant has a minimum capacity of 200 Litres of neem oil per day.

## Production Process

The oil can be obtained through pressing (crushing) of the seed kernel through cold pressing. It can also be obtained by solvent extraction of neem seed, fruit, oil cake or kernel.

## Scale of Investment

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Storage bins | No | 3 | 71.5 | 214.5 |
| Solvent Extraction plant | No | 1 | 2322.1 | 2322.1 |
| Boiler | No | 1 | 3020.6 | 3020.6 |
| Feed bins | No | 3 | 163.9 | 491.7 |
| Neem oil storage unit | No | 1 | 880 | 880 |
| Total |  |  | 5,871 | 6928.6 |

## Production and Operation Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost// <br> mth | Pdn <br> Cost/ <br> Year1 |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct costs3:

| Neem seed | Kgs | 15 | 100 | 1500 | 39,000 | 468,000 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| solvent | Litrs | 10 | 5 | 50 | 1300 | 15,600 |
| Packing <br> materials | No | 0.1 | 150 | 15 | 390 | 4,680 |
| Subtotal |  |  |  |  | 40,690 | 488,280 |

## General costs (Overheads)

| Labour | 300 | 3,600 |
| :--- | :---: | :---: |
| Utilities | 300 | 3,600 |
| Selling and Distribution | 100 | 1,200 |
| Administrative expenses | 150 | 1,800 |
| Shelter | 300 | 3,600 |
| Depreciation (Asset write off) <br> Expenses | 131 | 1,575 |
| Sub-total | 41,971 | 503,655 |
| Total Operating Costs |  | 15,375 |

1. Production is assumed for 312 days per year.
2. Depreciation assumes 2 year life of assets written off at $50 \%$ per year for all assets.
3. A production Month is assumed to have 26 days.

## Project Product Costs and Price Structure

| Item | Qty / <br> day | Qty/yr | @ | Pdn/yr <br> (\$) | UPx | T/rev(\$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Neem oil | 200 | 62,400 | 8.1 | 503,655 | 9 | 561,600 |
| Total |  | 62,400 |  | 503,655 |  | 561,600 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,800 | 46,800 | 561,600 |
| Less: Production and <br> Operating Costs | 1,614 | 41,971 | 503,655 |
| Profit | 186 | 4,829 | 57,945 |

## Market Analysis

Neem has become the favorite of business firms abroad which firms are now buying tonnes of seeds to produce Neem-based biopesticides. With the medicinal value attached to Neem trees, neem oil can be used in different cosmetics industries.

## Agriculture Sector



## UREA-MOLASSES MULTI -NUTRIENT BLOCK

## Introduction

This project is about manufacturing cattle licks containing Urea, Molasses, Vitamins, Minerals and other nutrients that may be included in the recipe. These blocks are quite convenient to package, transport, and store. This is an easy feeding method and it is quite nutritive because the lick combines a variety of nutrients. At the manufacturing level, a lot more can be added as may be desired.

## Process and Production Capacity

Preparation of the ingredients is done before the whole process starts. The mixing is done in a clear sequence -Molasses are put first, then Urea is added, followed by Salt and Minerals, Cement follows and finally Bran is added. The addition of water should follow a ratio of 3-4 litres per 10kgs of cement. The paste formed
can then be put into moulds that may be the size of $25 \times 15 \times 10 \mathrm{~cm}$ and the molded blocks are put in a well ventilated shade where they may be kept between 24-72 hrs. The mixing may be manual where production does not exceed 150 blocks a day.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | total |
| :--- | :--- | :--- | :--- | :--- |
| Delivery Van(1.5tone) | No | 1 | 28,000 | 28,000 |
| Mould | No | 4 | 30 | 120 |
| Wheelbarrow, Spades | No | - | - | 44 |
| Weighing Scale | No | 1 | 75 | 75 |
| Furniture \& Fittings | No | - | - | 200 |
| Total | 28,439 |  |  |  |

Operating Costs in US\$

| Cost Item | Units | $@$ | Qty/ <br> day | Pdn Cost/ <br> day | Pdn Cost/ <br> mth | Pdn Cost/ <br> yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Molasses | kgs | 0.25 | 98 | 25 | 637 | 7,644 |
| Urea | kgs | 2 | 25 | 50 | 1300 | 15,600 |
| Bran | kgs | 0.06 | 63 | 4 | 98 | 1,179 |
| Soybeans | kgs | 0.4 | 33 | 13 | 343 | 4,118 |
| Cement | kgs | 0.28 | 25 | 7 | 182 | 2,184 |
| Salt | Kgs | 0.4 | 8 | 3 | 83 | 998 |
| Sub-total |  |  | 252 | 102 | 2644 | 31,724 |

## General costs(Overheads)

| Rent | 200 | 2,400 |
| :--- | :---: | :---: |
| Labour | 225 | 2,700 |
| Utilities | 23 | 270 |
| Selling \& distribution | 87 | 1,040 |
| Miscellaneous | 33 | 400 |
| Depreciation | 592 | 7,110 |
| Sub-total | 1160 | 13,920 |
| Total Operating Costs | 3,804 | 45,644 |

## Project Product Costs \& Price Structure

| Item | Qty/day | Qty/yr | @ | Pdn Cost/yr | UPx | Total Rve |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Urea <br> Molasses | 50 | 15,600 | 2.76 | 45,644 | 4.5 | 70,200 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 225 | 5,850 | 70,200 |
| Less: Production and <br> Operating Costs | 146 | 3,804 | 45,644 |
| Profit | 79 | 2,046 | 24,556 |

## Marketing Analysis

The Urea-Molasses and cattle licks are very popular with farmers because of their nutritive value. They contain many ingredients that can hardly be found in any one other feed.

## Government Incentive

The government maintains liberalized policies on trade and commerce that allow free marketing and non-taxing of exports etc. Government bureaucrats offer free advisory consultancy services to those who care to use them.

## Agriculture Sector



## 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:
Cut chillies roughly
Peel \& chop garlic
Measure the capacity of your bottle with the jug \& water
Add chillies and garlic to the jug \& enough vinegar to make the volume you need

## Transfer these to a pan

Add 5 teaspoons of salt, and a teaspoon of sugar
Heat to boil
Blend this mixture until smooth
Re-heat in the pan \& 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 Chil
Manufacturing includes: Food-blender, a sauce pan, graduated jug \& clean bottles.

## Capital Investment Requirements and Equipment

The project will be operated locally on small scale, i.e. producing at least 5001 trs of processed Chilli per day ( $15,000 \mathrm{ltr} /$ month). The total Fixed and Working Capital Investment required to start this project is estimated at USD 26,955.

## Market Analysis:

Chilli may be sold locally in Super markets, Whole sale shops, Groceries and Hotels. It can also be exported.
Capital Investment in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Delivery Van | No. | 1 | 26,000 | 26,000 |
| Food Blender | No. | 1 | 150 | 150 |
| Sauce Pan | No. | 2 | 100 | 200 |
| Gas Cooker | No. | 1 | 600 | 600 |
| Jug | No. | 1 | 5 | 5 |
| Total Amount |  |  |  | 26,955 |

Operating Costs in US\$

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ day | Prod. Cost/ <br> month | Prod. Cost/ <br> Year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Hot pepper | Kgs | 1.3 | 500 | 650 | 16,900 | 202,800 |
| Vinegar | Litrs | 3 | 50 | 150 | 3,900 | 46,800 |
| Garlic | Kgs | 4.8 | 50 | 240 | 6,240 | 74,880 |
| Packaging | Botls | 0.4 | 500 | 200 | 5,200 | 62,400 |
| Salt | Kgs | 0.4 | 20 | 8 | 208 | 2,496 |
| Sub total |  |  |  | 1248 | 32,448 | 389,376 |

## General Costs (Over heads)

| 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 | 562 | 6,739 |
| :--- | :--- | :--- |
| Sub - total | 3,962 | 47,539 |
| Total Operating Costs | 36,410 | 436,915 |

Project Product Costs \& Price Estimate in US\$

| Item | Qty/day | Qty/yr | $@$ | Pdn Cost/yr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Chill Sauce | 500 | 156,000 | 2.8 | 436,915 | 3 | 468,000 |

Profitability Analysis:

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 1,500 | 39,000 | 468,000 |
| Less: Production \& Operating Costs | 1,248 | 36,410 | 436,915 |
| Profit | 540 | 10,495 | 125,941 |

## Sources of Supply of Raw Materials

Raw materials will be supplied from Hot pepper growing areas of Uganda especially in the North and Central regions.

## 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, Tax exemptions, Land, Basic infrastructure, Grants and long term Loans at relatively low interest rates and a liberalized market. Private Sector Foundation of Uganda has finances to support this type of venture.

## Agriculture Sector



## FRUIT SALAD PROCESSING AND VENDING

## Introduction:

This business idea is for making and marketing/vending of fruits. It involves selling varieties of fruits like mangoes, pineapples, paw paws, watermelon, apples and sweet bananas which are bought in large quantities, washed, peeled, cut into pieces and packed in disposable containers to make the fruit salads.

Their market structure and demand is relatively high especially in urban areas.

The business risk involved is healthy and safety related risks surrounding the manufacturing and processing but can be solved by employing food scientists and adhering to a strict safety and hygienic regime

## Production Capacity:

Production capacity depends on the capital invested and capital capability. This business idea targets a sale of 250 fruit salads packed in containers per day, which translates into 6,500 packages per month. The revenue potential is estimated at US\$200 per day, translating into US $\$ 62,400$ per annum inclusive of a sales margin of $10 \%$. The estimated total investment capital required to establish this project is estimated at US $\$ 704$. The payback period is about 1 month and the net profit is $26 \%$.

## Technology and Process Description:

Fruit vending involves a door to door delivery of services and has no complicated technology involved. Fruit processing is relatively simple because fruits are bought in large quantities, washed, peeled, cut into pieces, mixed and packed into containers in a desired quantities for sale.

## Capital Investment Requirements in US\$

| capital investment requirements |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Capital Investment Item | Units | Qty | @ | Amount |  |
| Refrigerator | No | 1 | 400 | 400 |  |
| Wrapping machine | No | 1 | 210 | 210 |  |
| Knives | No | 4 | 1 | 4 |  |
| Buckets | No | 5 | 6 | 30 |  |
| Uniforms | No | 5 | 12 | 60 |  |
| Total |  |  |  | 704 |  |

## Direct Materials, Supplies and Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost// <br> month | Pdn cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Mangoes | No | 0.2 | 100 | 20 | 520 | 6,240 |
| Sugarcanes | No | 0.7 | 10 | 7 | 182 | 2,184 |
| Water <br> mellon | No | 1.2 | 10 | 12 | 312 | 3,744 |
| Apples | No | 0.24 | 50 | 12 | 312 | 3,744 |
| Pineapples | No | 0.6 | 25 | 15 | 390 | 4,680 |
| Pawpaws | No | 1 | 25 | 25 | 650 | 7,800 |
| Sweet <br> bananas | No | 0.04 | 100 | 4 | 104 | 1,248 |
| Pears | No | 0.2 | 50 | 5 | 130 | 1,560 |
| Grapes | Kg | 3 | 5 | 15 | 390 | 4,680 |
| Jack fruit. | No | 2 | 1 | 2 | 52 | 624 |
| Packing <br> Materials | No | 0.1 | 250 | 25 | 650 | 7,800 |
| Sub-total |  |  | 626 | 142 | 3,692 | 36,114 |

## General Costs(Overheads)

| Utilities (water \& Power) |  |  |  | 2 | 52 | 624 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Transport |  |  |  | 15 | 390 | 4,680 |
| Labour |  |  |  | 10 | 260 | 3,120 |
| Miscellaneous Costs |  |  |  | 5 | 130 | 1560 |
| Depreciation (Asset write off) Exp |  |  |  | 0.52 | 13.52 | 162.24 |
| Sub-total | 13 | 2500 | 32500 | 28 | 845.52 | 10,146 |
| Total Operating Costs |  |  |  | 170 | 4,538 | 46,800 |

Production costs assumed are for 312 days per yearwith a daily capacity of 250 packages of fruit salads.
Depreciation (fixed asset write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets.
Direct Costs include materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 work days.

Project Product Costs and Price Structure

| Item | Qty/ day | Qty $/ \mathrm{Yr}$ | $@$ | Pdn cost $/ \mathrm{Yr}$ | UPx |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Fruit Salads | 250 | 78,000 | 0.6 | 46,800 | 0.8 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 200 | 5,200 | 62,400 |
| Less: Production and Operating Costs | 148.27 | 3,855 | 46,800 |
| Profit | 51.73 | 1,345 | 15,600 |

## Market Analysis

There is a high demand in densely populated areas and the Ugandan population is highly sensitized about the use of fruits through radios and other media channels.

## Agriculture Sector



REARING LOCAL HENS FOR EGGS

## Introduction

This business idea is for rearing of local hens for production of eggs. A hen is a domestic fowl bred for eggs or meat. This business idea is viable because you can get eggs, meat, hatch more chicks, which can also be sold at your wish. The business risk involved is diseases like cocidiosis; the solution is proper management and control of the business.

This business idea aims at production of 30,000 trays of eggs annually and 3,000 off layers per year. The revenue potential is estimated at US $\$ 135,000$ annually. The initial capital investment cost for the project is US $\$ 995$. The first three months demand a lot of investment yet returns are not realized. This idea needs a lot of patience.

## Processes description

Chicks are kept in the brooder in which they are vaccinated and well fed on chick mash for 2 months till they grow feathers. They are then shifted to the main shelter in which they are fed for 3 months on growers mash. Cocks are then introduced to help fertilize the eggs. Reduce the noise, feed them on greens, ensure that water is enough and the hens will lay eggs.

## Scale of Investment

Capital Investment Requirements in US\$

| Capital Investment Requirements in USS |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Capital Item | Units | Qty | $@$ | Amount |
| Feeders | No | 50 | 3 | 125 |
| Drinkers | No | 60 | 2 | 90 |
| Brooder | No | 2 | 80 | 160 |
| Poultry house | No | 3 | 200 | 600 |
| Stands | No | 4 | 5 | 20 |
| Total |  |  |  | 995 |

Production and Operating Costs in US\$

| Cost Item | Units | @ | Qty | Amount | Pdn Cost// <br> month | Pdn Cost/ <br> Year1 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct costs3: |  |  |  |  |  |  |
| Chicks | No | 1 | 3000 | 3000 | 15 | 180 |
| Coffee Husks | Bags | 4 | 20 | 80 | 4 | 48 |
| Feeds | Bags | 40 | 30 | 1200 | 4 | 48 |
| Medicine <br> and vaccines | Times | 4 | 12 | 48 | 4 | 48 |
| Egg trays | Pcs | 0.75 | 300 | 225 | 4 | 48 |
| Subtotal |  |  |  |  | 31 | 372 |

## General costs (Overheads)

| Labour | 300 | 3,600 |
| :--- | :---: | :---: |
| Utilities (water and electricity) | 50 | 600 |
| Administrative expenses | 100 | 1,200 |
| Shelter (rented) | 150 | 1,800 |
| Depreciation (Asset write off) Expenses | 35 | 420 |
| Sub-total | 635 | 7,620 |
| Total Operating Costs | 666 | 7,992 |

Production is assumed for 365 days per year.
Depreciation assumes 2 year life of assets written off at $50 \%$ per year for all assets.

## Project Product Costs and Price Structure

| Item | Period | Units | Output/ <br> year | $@$ | UPx | TC | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eggs | 12 months | Trays | 30,000 | 3 | 4 | 90,000 | 120,000 |
| Off <br> Layers | 1.5 years | No. | 3,000 | 4 | 5 | 12,000 | 15,000 |
| Total |  |  |  |  |  | 102,000 | 135,000 |

## Profitability Analysis Table in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 429 | 11,143 | 135,000 |
| Less: Production and <br> Operating Costs | 25 | 660 | 7,992 |
| Profit | 403 | 10,483 | 127,008 |

## Government facilities and incentives

The government of Uganda has continued to support agriculture through bodies like NAADS to advise farmers on how to rear poultry. There are extension workers and Veterinary Doctors in every district to offer free advice to farmers.

## Market analysis

To survive in the highly competitive market one has to target supply to supermarkets, individual consumers and the export market.

## Agriculture Sector



## MAKING MAYONAISE CREAM

## Introduction

The business idea is for production and marketing of mayonnaise cream. Mayonnaise is a thick, creamy sauce or dressing that is made of oil, egg yolks, lemon juice or vinegar and seasonings. The total potential revenue is estimated at US $\$ 156,000$ per year, the production capacity is estimated at 200 containers per day and the total investment cost is estimated at US $\$ 9,300$. The net profit is $26 \%$ while the payback period is 1 month.

## General costs (overheads)

| Utilities (water and power) | 125 | 1,500 |
| :--- | :---: | :---: |
| Labour | 160 | 1,920 |
| Rent | 120 | 1,800 |
| Miscellaneous costs | 150 | $1,80 ` 0$ |
| Distribution costs | 300 | 3,120 |
| Depreciation(Asset write off)Expenses) | 194 | 2,325 |
| Sub -total | 1049 | 12,465 |
| Total Operating Costs | 9,556 | 114,551 |

1. Production costs assumed 312 days per year with a daily capacity of 200 tins of mayonnaise
2. Depreciation (fixed assets write off) assumes 4 years life of assets written off at 25\% per year.
3. Direct costs include materials, supplies and other costs that directly go into production of the product.

## Project product Costs and Price Structure

| Item | Qty /day | Qty/yr | @ | Pdncost /yr | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Mayonnaise <br> cream | 200 | 62,400 | 2.3 | 114,551 | 2.5 | 156,000 |

## Profitability Analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 500.0 | 13,000 | 156,000 |
| Less production and operating <br> Costs | 367.2 | 9,546 | 114,551 |
| Profit | 132.8 | 3,454 | 41,449 |

## Market Analysis

Mayonnaise is commonly served with sandwiches and with salads. Therefore, the product has high demand. It is supplied to super markets, shops, hotels and restaurants as major outlets.

## Sources of raw materials:

Raw materials are locally available in shops and markets.

## Agriculture Sector



## MAKING MATS

## Introduction

This business idea is for production and marketing of Palm leaves mats. Mats are popular in homes and are widely used among all sections of the society. Thus, mat making is a good investment that can easily be taken up by women. The production capacity per day is estimated at 30 Mats and the revenue is estimated at US $\$ 37,440$ per year with a net profit of $37 \%$.

## Production process

Mat making involves collecting palm leaves, drying it in preffered colors and finally weaving the palm leaves into different kinds of Mats. They can be made with threads, which are dried and sewed with a needle.

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Sewing needle | No. | 5 | 5 | 25 |
| Knives | No. | 5 | 1 | 5 |
| Basins | No. | 10 | 2 | 20 |
| Total Cost |  |  |  | 45 |

## Production and Operating costs in US\$

| Cost Item | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Palm leaves | 0.6 | 100 | 60 | 1,560 | 18,720 |
| Colors(kg) | 0.5 | 6 | 3 | 69 | 828 |
| Sub-total |  |  |  | 1,629 | 19,548 |

## General costs

| Utilities(water and power) | 26 | 312 |
| :--- | :--- | :--- |
| Labour | 100 | 1200 |
| Rent | 60 | 720 |
| Miscellaneous costs | 20 | 240 |
| Distribution costs | 130 | 1,560 |
| Depreciation) | 1 | 12 |
| Sub -total | 337 | 4,044 |
| Total Operating Costs | 1,966 | 23,592 |

1 Production costs assumed $\mathbf{3 1 2}$ days per year with a daily capacity of $\mathbf{3 0}$ mats
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

| Item | Qty/day | Qty/yr | @ | Pdn cost /yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Mats | 30 | 9,360 | 2.19 | 23,592 | 4 | 37,440 |

## Profitability Analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 120 | 3,120 | 37,440 |
| Less production and operating <br> Costs | 75.6 | 1,966 | 23,592 |
| Profit | 44.4 | 1,154 | 13,848 |

## Market Analysis

Mats are ideal for use in aisles of homes parties and mosques. These therefore form the market.

## Sources of Raw materials:

Raw materials can be sourced locally.

## Government Facilities and Incentives

The government has got incentives for those who are involved in the manufacturing sector as a bid to encourage setting up small and medium enterprises. Soft loans and grants are available in banks and other financial organizations for industrialists.

## Agriculture Sector



## ESTABLISHING A BAKERY

## Introduction

Bread and Confectionary products are a lucrative business. These, especially bread, are quite nutritive and easily preserved and the shelf life can be prolonged. These are products commonly stocked almost by all provision stores. Bread is one common product on people's dining tables to a sizeable proportion of the urban and semi-urban communities and therefore, enjoys a ready market.

This is a project to produce bread, cakes, buns, mandazi, doughnuts etc. It requires capital investment of US $\$ 55,580$, yield revenue of 920,400 and net profit margin of $60 \%$.

## Capital Requirements and equipment

The investment scale depends on the project set objectives.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | total |
| :--- | :--- | :--- | :--- | :--- |
| Land \& Buildings | No |  |  | 25,000 |
| Firewood Oven | No | 1 | 3,500 | 3,500 |
| Mixer | No | 1 | 2,700 | 2,700 |
| Proover System | No | 1 | 750 | 750 |


| Doughnut Stove | No | 1 | 50 | 50 |
| :--- | :--- | :--- | :--- | :--- |
| Trays | No | 100 | 10 | 1,000 |
| Tins (1kg-size) | No | 40 | 12 | 480 |
| Tins (1/2kg-size) | No | 40 | 10 | 400 |
| Furniture \&Fittings | No |  | 2,000 | 2,000 |
| Delivery Van | No | 2 | 9,000 | 18,000 |
| Slicing Machine | No | 1 | 1,250 | 1,250 |
| Other tools | No |  | 450 | 450 |
| Total |  |  |  | 55,580 |

## Production and Operating Costs

| (a)Direct Materials, Supplies and Costs in \$ |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost/day | Pdn Cost/ <br> month | Pdn Cost/ <br> year |
| Direct Costs |  |  |  |  |  |  |
| Wheat flour | kgs | 2 | 1,000 | 2,000 | 52,000 | 624,000 |
| Salt | kgs | 1 | 20 | 20 | 520 | 6,240 |
| Sugar | kgs | 1 | 250 | 250 | 6,500 | 78,000 |
| Yeast | kgs | 6 | 20 | 120 | 3,120 | 37,440 |
| Improver | kgs | 4 | 20 | 20 | 520 | 6,240 |
| Water | Ltrs | 0.05 | 1,200 | 60 | 1,560 | 18,720 |
| Vanilla | Btls | 1 | 5 | 5 | 130 | 1,560 |
| Cooking fat | Itrs | 2 | 20 | 40 | 1,040 | 12,480 |
| Packaging <br> materials | Pcs | 0.03 | 2,500 | 75 | 1,950 | 23,400 |
| Other <br> materials |  |  |  | 4 | 104 | 1,248 |
| Sub-total |  |  |  | 2,594 | 67,444 | 809,328 |
| General Costs (Overheads) |  |  |  |  | 1,200 | 14,400 |
| Labour |  |  |  |  | 680 | 8,160 |
| Utilities |  |  |  | 1,800 | 150 |  |
|  <br> distribution |  |  |  |  |  |  |


| Administration <br> expenses |  |  |  |  | 267 | 3,200 |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  <br> toiletries |  |  |  |  | 192 | 2,300 |
| Miscellaneous |  |  |  |  | 175 | 2,100 |
| Depreciation |  |  |  |  | 600 | 50 |
| Sub-total |  |  |  |  | 4,914 | 30,360 |
| Total Operating Costs |  |  |  |  |  |  |

1) Production costs assumed 312 days per year with daily capacity of producing 2,750 loaves of bread.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

Project Product Costs and Price Structure

| Item | Qty/ day | Qty/yr | $@$ | Pdn Cost/yr | UPx | Total Rve |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bread-1kg | 1,250 | 390,000 | 1 | 300,688 | 1.4 | 546,000 |
| Bread- <br> $1 / 2 \mathrm{~kg}$ | 1,500 | 468,000 | 0.5 | 539,000 | 0.8 | 374,400 |
| Total | 2,750 | 858,000 |  | 839,688 |  | 920,400 |

Profitability Analysis Table

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 2,950 | 76,700 | 920,400 |
| Less: Production \& Operating Costs | 2,691 | 69,974 | 839,688 |
| Profit | 259 | 6,726 | 80,712 |

## Market Analysis

Bread is a household item, therefore it has a ready market throughout the year and the country

## Government Facilities and Incentives

There exists a liberalized trade policy. Bakery owners are allowed to import wheat tax free and process it into wheat flour.

## Agriculture Sector

## JUICE EXTRACTION - APPLES

## Introduction:

This profile envisages the establishment of a plant for the production of apple juice with a capacity of 2,000 liters per day. Apple juice is the unfermented juice obtained from sound, ripe apples.

## 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 2,000 liters 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.

## 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.

## Capital Investment Requirements

The Scale of investment for this project capital is estimated at USD18 965, to yield an estimated annual amount of US $\$ 1,248,000$.

## Market Analysis \& Projected Demand

Apple juice may be sold in Super markets, Schools, Hospitals, Hotels, Retail shops and Exported.

## Capital Requirements:

| Capital Investment <br> Item | Units | Qty | @\$ | Amount \$ |
| :--- | :---: | :---: | :---: | :---: |
| Delivery Van | No. | 1 | 12,000 | 12,000 |
| Juice Extractor | No. | 1 | 2,500 | 2,500 |
| Jar Lifter | No. | 1 | 1,000 | 1,000 |
| Timer | No. | 1 | 20 | 20 |
| Juice Tanks | No. | 5 | 50 | 250 |
| Boiler | No. | 1 | 500 | 500 |
| Furniture | No. | 3 | 65 | 195 |
| Labeler | No. | 1 | 500 | 500 |
| Packaging Machine | No. | 1 | 2000 | 2,000 |
| Total Amount |  |  | 18,635 | 18,965 |

## Operating Costs

| Item | Units | $@$ | Qty/ <br> day | Prod. <br> Cost/days | Prod. Cost/ <br> months | Prod. Cost/ <br> Year[1]s |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Apples | Kgs | 1.5 | 1000 | 1500 | 39000 | 468000 |
| Flavours | Kgs | 1 | 50 | 50 | 1300 | 15600 |
| Food Colours | Kgs | 1 | 50 | 50 | 1300 | 15600 |
| Preservatives | Kgs | 5 | 50 | 250 | 6500 | 78000 |
| Sugar | Kgs | 1.2 | 200 | 240 | 6240 | 74880 |
| Water | Litres | 0.04 | 100 | 4 | 104 | 1248 |
| Sub total |  |  |  | 2,094 | 54,444 | 653,328 |


| General Costs (Over heads) |  |  |  |  |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/days | Prod. Cost/ <br> month\$ | Prod. Cost/ <br> Year[1]\$ |
| Rent |  |  |  |  | 500 | 6,000 |
| Packaging <br> Material |  |  |  |  | 500 | 6,000 |
| Labour |  |  |  |  | 1500 | 18,000 |
| Utilities <br> (Power) |  |  |  |  | 400 | 4,800 |
|  <br> Servicing |  |  |  |  | 300 | 3,600 |
| Fuel |  |  |  |  | 500 | 6,000 |
| Depreciation <br> (Asset write <br> off) Expenses |  |  |  |  | 300 | 3,600 |
| Sub - total |  |  |  |  |  |  |
| Total Operating Costs |  |  |  | $4,000.00$ | $48,000.00$ |  |

## Project Product Costs \& Price Structure

| Item | Qty/day | Qty/yr | @S | Pdn Cost/yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Apple Juice | 2000 | 624,000 | 1.4 | 910,635 | 2 | $1,248,000$ |

## Profitability Analysis

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 4,000 | 104,000 | $1,248,000$ |
| Less: Production \& Operating Costs | 2,248 | $58,444.00$ | 701,328 |
| Profit | 1,752 | $45,556.00$ | 546,672 |

## Sources of Supply of Raw Materials:

The major raw material, apple fruit can be grown in the region, in areas like Kanungu \& Kabaale or sourced from neighboring regions like Kenya.

## Government Facilities and Incentives Available:

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

## Agriculture Sector

## 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 $1,000 \mathrm{~kg}$ s 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, which 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.

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

The project will be operated locally on small scale, i.e. producing at least 350 kg of processed Cheese per day ( $105,000.00 \mathrm{KGS} /$ annum ). The total Fixed Capital Investment required to establish this project is estimated at USD 20,475 . It is expected to yield an estimate of US $\$ 936,000$ and a net profit margin of $50 \%$.

## 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.

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Milk Van | No. | 1 | 8,000 | 8,000 |
| Cream Separator | No. | 1 | 1,600 | 1,600 |
| 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 |
| Total Amount |  |  |  | 20,475 |

## Operating Costs in US\$

|  | Units | @ | Qty/ <br> day | Prod. <br> Cost/day | Prod. Cost// <br> month | Prod. <br> Cost/ Year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Milk | Litres | 1 | 1,000 | 1,000 | 26,000 | 312,000 |
| Enzymes | Litres | 2 | 100 | 200 | 5,200 | 62,400 |
| Salt | Kgs | 1 | 50 | 50 | 1,300 | 33,800 |


| Phosphate | Kgs | 2 | 50 | 100 | 2,600 | 67,600 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Sub total |  |  |  | 1,350 | 35,100 | 475,800 |

General Costs (Over heads)

| Rent |  |  |  |  | 300 | 3,600 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Packaging <br> Material | 150 | 1,800 |  |  |  |  |
| Labour | 350 | 4,200 |  |  |  |  |
| Utilities <br>  |  |  |  |  | 400 | 4,800 |
| Water) |  |  |  |  | 200 | 2,400 |
|  <br> Servicing |  |  |  |  |  | 200 |
| Fuel |  |  |  | 434 | 5,208 |  |
| Depreciation (Asset write off) Expenses |  | 72,234 | 976,008 |  |  |  |
| Sub - <br> total |  |  |  |  |  |  |
| Total Operating Costs |  |  |  |  |  |  |

## Project Product Costs \& Price Structure in \$

| Item | Qty/ day <br> $(\mathrm{Kg})$ | Qty/yr (Kg) | @ | Pdn Cost/ <br> yr | UPx | $\mathrm{T} / \mathrm{rev}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cheese | 1,000 | 312,000 | 2 | 624,000 | 3 | 936,000 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 3,000 | 78,000 | 936,000 |
| Less: Production \& Operating Costs | 1,525 | 39,650 | 475,800 |
| Profit | 1,475 | 38,350 | 460,200 |

## Sources of Supply of Raw Materials

Raw materials will be locally sourced from Dairy farmers especially from Western Uganda.

## Agriculture Sector



## BANANA FABRIC POLYMER

## Introduction

A cost- effective substitute for glass fibre, banana fibre polymer composite can be a very good fibre-reinforced with 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 $\$ 4,325$ with a capacity of $10,000 \mathrm{~kg}$ per annum yielding an estimated revenue of US $\$ 62,000$ per year with a payback period of 2 years and 1 month.

## 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.

Capital Investment Requirement in US \$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Two roll crusher | No | 1 | 1,000 | 1,000 |
| Drying chambers | No | 1 | 800 | 800 |
| Weighing balance | No | 1 | 25 | 25 |
| Cutting and splitting <br> equipment | No | 2 | 1,000 | 2,000 |
| Open vat | No | 1 | 500 | 500 |
| Total |  |  |  | 4,325 |

## Direct materials, supplies and costs

| Cost Item | Units | $@$ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Cost |  |  |  |  |  |  |
| Banana pseudo <br> stem | Kgms | 0.025 | 321 | 8.01 | 208 | 2,499 |
| Chemical | Litres | 5 | 0.64 | 3.2 | 83.2 | 998 |
| Paper / Plastic <br> roll stems | Rolls | 2 | 3 | 4.5 | 117 | 1,404 |
| Polythene <br> bags/ sacks | packets | 0.4 | 3.2 | 1.33 | 35 | 415 |
| Other materials |  | - | - | - | 10 | 120 |
| Sub-total | - | - | - | 17 | 453 | 5,438 |

## General Costs (Overheads)

| 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 |
| Sub-total | 1,753 | 21,039 |
| Total Operating Costs | $2,206.18$ | 26,477 |

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 $\mathbf{\$}$

Project product costs and Price structure in US S

| Item | Qty/ <br> day | Qty/yr | Unit <br> Cost | Pdn <br> cost/yr | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Banana Fabric <br> Polymer | 32 | 10,000 | 5.70 | 56,972 | 6.20 | 62,000 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 199 | 5,166 | 62000 |
| Less: Production and operating costs | 85 | 2,206 | 26,477 |
| Profit | 16 | 419 | 35,523 |

## Market

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.

## Source of Equipment

Equipment can be locally made by Tonet Ltd, Kanyanya, Gayaza Rd and others or imported.

## 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.

## Agriculture Sector



## 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 4,000 litres of yoghurt will be produced per day leading to 1,248,000 litres per year.

## 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 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, Stabilizers, Sugar, Flavour, color and lactic cultured.

## Equipment:

The major Equipment needed in the making of yoghurt includes: Packaging machine, Milk tanks, \& Refrigerators. Capital Investment Requirements: The total investment cost of the Project is estimated at USD 38,440. It is expected to yield an estimated revenue of US $\$ 4,992,000$.

## Market Analysis \& Projected Demand:

There is a ready market for Yoghurt among the Youths and Children who cherish the product.

## Project Costs in US\$

Capital Investment Requirements:

| Capital Investment Item | Units | Qty | @s | Amount \$ |
| :--- | :--- | :--- | :--- | :--- |
| Delivery Van | No. | 1 | 12,000 | 12,000 |
| Milk Truck | No. | 1 | 12,000 | 12,000 |
| Refrigerators | No. | 2 | 400 | 800 |
| Packaging Machine | No. | 1 | 13,000 | 13,000 |
| Milk Tanks | No. | 2 | 320 | 640 |
| Total Amount |  |  | 37,720 | 38,440 |

## Operating Costs in US\$

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/day | Prod. Cost/ <br> month | Prod. <br> Cost/ Year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Milk | Litres | 1 | 500 | 500 | 13,000 | 156,000 |
| Starter | Litres | 2 | 5 | 10 | 260 | 3,120 |
| Flavour | Kgs | 1 | 5 | 5 | 130 | 1,560 |
| Food Colour | Kgs | 1 | 5 | 5 | 130 | 1,560 |
| Sub total |  |  |  | 14,040 | 365,040 | $4,380,480$ |
| Rent |  |  |  |  | 250 | 3,000 |
| Packaging |  |  |  |  | 500 | 6,000 |
| Labour |  |  |  |  | 600 | 7,200 |
| Utilities <br> (Power <br> \&Water) |  |  |  |  | 500 | 6,000 |


|  <br> Maintenance |  |  |  |  | 200 | 2,400 |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
| Fuel |  |  |  |  | 250 | 3,000 |
| Depreciation (Asset write off) Expenses |  | 250 | 1,500 |  |  |  |
| Sub - total |  |  |  | 2,550 | 29,100 |  |
| Total Operating Costs |  |  | 367,590 | $4,409,580$ |  |  |

Project Product Costs and Price Structure in US\$

| Item | Qty/day | Qty/yr | @\$ | Pdn Cost/yr | UPx | Total /rev |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| Yoghurt | 4,000 | $1,248,000$ | 3.5 | $4,409,580$ | 4 | $4,992,000$ |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 16,000 | 416,000 | $4,992,000$ |
| Less: Production \& Operating Costs | 14,763 | 383,834 | $4,409,580$ |
| Profit | 1,237 | 32,166 | 582,420 |

## Sources of Supply of Raw materials

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.

## Government Facilities and Incentives Available

 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 the Agro-processing industry in Uganda.
## Agriculture Sector

## MAKING FERTILIZERS FROM DRY BONES

## Introduction

Uganda's economy is dominated by the agricultural sector and any investment such as production of agricultural fertilizers can be a very viable investment both in the short run and long run period of the investment. This project if implemented can yield total estimated revenue of US $\$ 123,552$ with a payback period of 1 year 4 months.

## Production Capacity and Technology

The production process involves digging of a 5 -ft deep pit with a radius of 1-metre. Charcoal or wood is put in the pit and on top of it dry bones are piled. The fire wood is ignited and the bones are burnt until they are spongy and brittle. The burnt bones are then removed and pounded by a simple mortar to a fine material, which contains calcium and phosphate. It does not matter even if burnt wood ash is mixed with the burnt bones. The fertilizer is then weighed and packed.

## Investment Scale, Capital Requirements \& Equipment

 The equipment needed is very simple as it may require the following tools tabled below:Capital Investment Requirements
Capital Investment Requirements

| Capital investment item | units | Qty | $@$ | Total(\$) |
| :--- | :--- | :--- | :--- | :--- |
| Axes | No | 10 | 5 | 50 |
| Pangas | No | 20 | 4 | 80 |
| wood splitting machine | No | 1 | 1,000 | 1,000 |
| Mortar | No | 2 | 400 | 800 |
| Hoes | No | 10 | 4 | 40 |
| Spades | No | 10 | 4 | 40 |
| Containers | No | 4 | 250 | 1,000 |
| Pick Up Van (3tones) | No | 1 | 12,500 | 12,500 |
| Packaging machine | No | 1 | 200 | 200 |
| Furniture \& Fixture | No | - | - | 1,500 |
| Weighing machine | No | 1 | 200 | 200 |
| Other tools | No | - | - | 300 |
| Total |  |  |  | 16,010 |

The machines are available on the local market.

## Production and Operating Costs in US\$

(a)Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/day | Pdn <br> cost/day | Pdn cost/ <br> mth | Pdn cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Dry bones | Kgs | 0.3 | 450 | 135 | 3,510 | 42,120 |
| Fire wood | Kgs | 0.25 | 600 | 150 | 3900 | 46,800 |
| Fuel | Ltrs | 0.8 | 14 | 11.2 | 291.2 | 3,494 |
| Match boxes | Pcs | 0.05 | 1 | 0.05 | 1.3 | 15.6 |
| Packaging <br> materials | Pcs | 0.7 | 8 | 5.6 | 145.6 | 1,747 |
| Sub-total |  |  | 1,073 | 301.85 | 3,608 | 94,177 |
| General Costs <br> (Overheads) |  |  |  |  |  |  |
| Labor |  |  |  |  | 500 | 6,000 |
| Utilities |  |  |  |  | 80 | 960 |
| Rent |  |  |  |  | 500 | 6,000 |


|  <br> toiletries |  |  |  |  | 121 | 1,450 |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  <br> distribution |  |  |  |  | 104 | 1,250 |
| Fuel |  |  |  |  | 208 | 2,500 |
| Miscellaneous <br> expenses |  |  |  |  | 71 | 850 |
| Depreciation |  |  |  |  | 360 | 4,315 |
| Sub-total |  |  |  |  | 1,944 | 23,325 |
| Total Operating Costs |  |  | 5,552 | 117,502 |  |  |

1) Production costs assumed are for 312 days per year with daily production capacity of 440 kgs of fertilizers.
2) Depreciation (fixed asset write off) assumes 4 -years life of assets written off at 25\% per year for all assets.
3) The valuation currency used is USD

## Market

Project Product Costs and Price Structure

| Item | Qty/day | Qty/year | @ | Pdn cost/ <br> year | UPx | Total/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Dry bone <br> Fertilizers | 440 | 137,280 | 1.3 | 117,502 | 0.9 | 123,552 |

Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 396 | 10,296 | 123,552 |
| Less: Pdn \&Operating Costs | 376.6 | 9,792 | 117,502 |
| Profit | 19.4 | 504 | 6,050 |

The fertilizer industry in Uganda is still very small as key players in the market are Tororo cement industry and Hima cement industry. Therefore, investing in fertilizer manufacturing is a very lucrative project.

## Government Facilities \& Incentives

Government programs such as: NAADS are aimed at improving agricultural production in the country \& therefore such projects are being supported by the government.

## Agriculture Sector



## SMOKING FISH

## Introduction

The business idea is for smoking and marketing of fish. This business idea is premised on smoking of 208 batches of fish per month which translates into 2,496 batches of fish per year. The revenue potential is estimated at US $\$ 5,824$ per month,which translates into US $\$ 69,888$ per year. The project cost is US $\$ 4,178$ for the first month of operation.

## Production Process

Fresh fish is cleaned and left to dry under sunshine for some time. It is then put on a wire mesh and covered with banana leaves in the oven for smoking. After some time, fish is changed over to allow both sides to dry. Fish is then removed from the oven or kiln and left to cool before being packed for dispatch.

Capital Investment Requirements in US\$

| Item | Unit | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Oven/ kiln | No. | 1 | 220 | 220 |
| Wire mesh | No. | 1 | 8.8 | 8.8 |
| Delivery van | No. | 1 | 3,850 | 3,850 |
| Fish Baskets | No. | 10 | 5.5 | 55 |
| Hand tools | No. | 5 | 8.8 | 44 |
| TC of Machinery |  |  |  | 4,178 |

## Production and Operation Costs

A). Direct materials, supplies and costs in US\$

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Prod. <br> cost/ <br> day | Prod. <br> cost/ <br> month | Prod. <br> cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fish | batches | 20 | 8 | 160 | 4,160 | 49,920 |
| Firewood | bundles | 1 | 3 | 3 | 78 | 936 |
| Sub-total |  |  |  |  | 4,238 | 50,856 |

## General costs (Overheads)

| Utilities (water) | 10 | 120 |
| :--- | :--- | :--- |
| Fuel | 390 | 4,680 |
| Rent | 50 | 600 |
| Salaries | 150 | 1,800 |
| Depreciation (Assets write off) Expenses | 73 | 876 |
| Sub-total | 673 | 8,076 |
| Total Operating costs | 4,911 | 58,932 |

Production costs assumed are for 312 days per year with a daily capacity of 8 batches.
Depreciation assumes 4 years life of assets written off at $25 \%$ and charged only on delivery van.

Direct costs include: Materials, supplies and other costs that directly go into production.

## Product cost and Price Structure in US \$

| Item | Qty/day | Qty /yr | @ | Prod./yr | UPx | TR (\$) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Fish | 8 | 2,496 | 24 | 58932 | 28 | 69,888 |

## Profitability Analysis

| Profitabitity Analysis | per day | per month | per year |
| :--- | :--- | :--- | :--- |
| Profitability item | 103 | 2688 | 69,888 |
| Revenue | 220 | 5,720 | 68,640 |
| Smoked fish | 189 | 4,911 | 58,932 |
| Less Prod \& Operating Costs | 35 | 913 | 10,956 |
| Profit |  |  |  |

## Market

Smoked fish is a delicacy to all tribes in Uganda; it is consumed in almost all regions of the country. Smoked fish can be supplied to colleges and schools, armed forces, hospitals and homes. There is also a ready market in Congo, Zambia, Zimbabwe and Sudan.

## Availability of Raw Materials

All the raw materials can be obtained from the local market; fish can be purchased from the nearby lake shores.

## Government Intervention

Government is encouraging fish farming as a way of eradicating poverty through the National Agricultural Advisory (NAADS) Programme by provision of various fish species that are resistant to harsh environment and diseases.

Fish farming is environmentally friendly. There are grants from European Union and other NGOs to Fish Farmers.

## Agriculture Sector



## MAKING CURRY POWDER

## Introduction

This business idea is for making curry powder. Curry powder is a mixture of spices of widely varying composition. It adds taste to food and stimulates secretion of gastric juices.

Curry powder is an item required in every household and thus has a good market potential both in urban and rural areas. Supply to supermarket chains, grocery/retail shops, restaurants and hotels are recommended for one to enter the market.

The business idea aims at production of 2,600 kgs of curry powder per month. The revenue potential is estimated at $\$ 218,400$ per year with a net profit of $12 \%$ and payback period of 4 months. The total capital investment for the project is US $\$ 9,270$.

## Plant Capacity

The profiled plant has a minimum capacity of 100 kgs of curry powder per day.

## Production Process

The production process involves toasting the spices, mixing the various spices, grinding the spices and packaging.

## Sources of supply of Equipments

All equipments can be got in Uganda.

## Scale of investment

## Capital Investment Requirements

| Capital Item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Spice Grinders | No | 1 | 1300 | 1300 |
| Sealing machine | No | 1 | 7200 | 7200 |
| Storage containers | No | 2 | 385 | 770 |
| Total |  |  | 8885 | 9270 |

## Production and Operation costs

| Cost Item | Units | @ | $\begin{aligned} & \text { Qty/ } \\ & \text { dav } \end{aligned}$ | Pdn Cost/ day | Pdn <br> Cost/ <br> mth | Prod. <br> Cost/ <br> Year1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct costs3: |  |  |  |  |  |  |
| Fenugreek Seeds | Kgs | 20 | 3 | 60 | 1,560 | 18,720 |
| Caraway Seeds | Kgs | 12 | 3 | 36 | 936 | 11,232 |
| Cinnamon Powder | Kgs | 15 | 5 | 75 | 1,950 | 23,400 |
| Cummin Seeds | Kgs | 15 | 8 | 120 | 3,120 | 37,440 |
| Ground mace | Kgs | 14 | 8 | 112 | 2,912 | 34,944 |
| Tumeric powder | Kgs | 8 | 15 | 120 | 3,120 | 37,440 |
| Packaging materials | Pieces | 0.2 | 100 | 20 | 520 | 6,240 |
| Sub-total |  |  |  |  | 14,118 | 169,416 |
| General costs (Overheads) |  |  |  |  |  |  |
| Labour |  |  |  |  | 500 | 6,000 |
| Utilities |  |  |  |  | 500 | 6,000 |
| Selling and Distribution |  |  |  |  | 150 | 1,800 |
| Administrative expenses |  |  |  |  | 250 | 3,000 |
| Shelter |  |  |  |  | 400 | 4,800 |
| Depreciation (Asset write off) Expenses |  |  |  |  | 79 | 948 |
| Sub-total |  |  |  |  | 1,879 | 22,548 |
| Total Operating Costs |  |  |  |  | 15,997 | 191,964 |

Production is assumed for 312 days per year.
Depreciation assumes 2 year life of assets written off at $50 \%$ per year for all assets.
A production Month is assumed to have 26 days.

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

| Item | Qty /day | Qty/yr | @ | Pdn/yr | UPx | Total <br> revenue |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Curry powder | 100 | 31,200 | 6 | 191,964 | 7 | 218,400 |
| Total |  |  |  | 191,964 |  | 218,400 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 700 | 18,200 | 218,400 |
| Less: Operating Costs | 615 | 15,997 | 191,964 |
| Profit | 85 | 2,203 | 26,436 |

## Market Analysis

The idea is a rural micro enterprise activity and has good demand in domestic as well as international markets. Areas of concentration would include restaurants, hotels, retail/grocery stores, tourist centers, parking yards, etc.

## Government Incentives

The government encourages agro-based investments because they add value. The tax policy is quite favorable to the industrialists; for instance if you export you enjoy reimbursement tax.

## Agriculture Sector

## PROCESSING SUGAR

## Introduction

Sugar is a very vital commodity in every household and its demand has increased both domestically and internationally with the local demand already exceeding supply.

The project idea is based on production of sugar using the cheapest technology with an estimated production output of $312,000 \mathrm{kgms}$ annually with fixed capital of US $\$ 38,100$ and operating costs of US $\$ 138,552$ employed to generate a total revenue of US $\$ 234,000$ with a net profit margin of $41 \%$ and a payback period of 1 year 6 months.

## Production Capacity, Technology \&Process

The harvested cane material is collected and crushed, the juice is collected and filtered and the liquid treated with lime to remove impurities. This is then neutralized with sulfur dioxide and then boiled. The sediment settles to the bottom and can be dredged out while scum rises to the surface and this is skimmed off. The heat is removed and the liquid crystallizes usually while being stirred to produce sugar crystals.

The production capacity greatly depends on the desired objectives of the entrepreneur, but the technology is simple mostly involving crushing, filtering, boiling and cooling.

## General Costs (Overheads)

| Fire wood/Fuel | 331 | 3,972 |
| :--- | :---: | :---: |
| Labor | 467 | 5,604 |
| Utilities | 375 | 4,500 |
| Selling \& distribution | 271 | 3,252 |
| Miscellaneous expenses | 117 | 1,404 |
| Depreciation | 794 | 9,528 |
| Sub-total | 2,355 | 28,260 |
| Total Operating Costs | 11,546 | 138,552 |

1) Production costs assumed are for 312 days per year with daily capacity of processing $1,000 \mathrm{kgs}$ of sugar.
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) Total monthly days assumed are 26 -work days.
5) The valuation currency used is United States Dollars.

Market Analysis
The market for sugar is already available as most of the sugar consumed is still being imported \& there is still a wide market in Southern Sudan.

## Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | @ | Pdn cost/yr | UPx | Total/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sugar | 1,000 | 312,000 | 0.44 | 138,552 | 0.75 | 234,000 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 750 | 19,500 | 234,000 |
| Less: Production \& Operating Costs | 444 | 11,546 | 138,552 |
| Profit | 306 | 7,954 | 95,448 |

## Government Facilities \& Incentives

The government has sourced a fund for both small scale and medium size entrepreneurs to facilitate their investment activities at a low interest rate known as the European Investment Fund.

## Agriculture Sector



## MAKING FISH PICKLES

## Introduction

This Business Idea is for manufacturing and marketing of fish pickles. This is a ready-to-eat product in form of sauce made out of fish. With the increasing demand for non-vegetarian pickles, making preserved ready-to-eat fish would be a lucrative activity This business idea is premised on production of $2,600 \mathrm{kgs}$ per month, which translates into $31,200 \mathrm{kgs}$ per year. The revenue potential is estimated at US $\$ 10,400$ per month translating into US $\$ 124,800$ per year and total Investment requirement of US $\$ 1,225$ for the first year of project operation.

## Production process

After cleaning, fish is placed in a salt solution or brine to increase the shelf life. Later, the fish is fried, mixed with spice powders, salt, vinegar, and oil and finally packed for the market.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Grinder | No | 2 | 250 | 500 |
| Cooking/frying Equipments | Set | 2 | 100 | 200 |
| Containers | No | 5 | 5 | 25 |
| Ice boxes | No | 2 | 50 | 100 |
| Gas stove | No | 1 | 400 | 400 |
| Total |  |  |  | 1,225 |

Production and Operating Costs
Direct Materials, Supplies and Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost// <br> day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Fish | Kg | 2.5 | 105 | 262.5 | 6,825 | 81,900 |
| Spices | Kg | 0.75 | 10 | 7.5 | 195 | 2,340 |
| Salt | Kg | 0.5 | 5 | 2.5 | 65 | 780 |
| Vinegar | Liter | 2 | 15 | 30 | 780 | 9,360 |
| Cooking Oil | Liter | 1 | 25 | 25 | 650 | 7,800 |
| Packaging | No | 0.1 | 100 | 10 | 260 | 3,120 |
| Sub-total |  |  | 260 | 337.5 | 8,775 | 105,300 |

General Costs(Over heads)

| Rent | 100 | 1,200 |
| :--- | :--- | :--- |
| Labour | 750 | 9,000 |
| Utilities(water \& gas) | 75 | 900 |
| Miscellaneous Costs | 50 | 600 |
| Transport costs | 50 | 600 |
| Depreciation (Asset write off) Exp | 26 | 306 |
| Sub-total | 1,051 | 12,606 |
| Total Operating Costs | 9,826 | 117,906 |

Production costs assumed are for 312 days per year with a daily capacity of 100 Kilograms of fish Pickles.
Depreciation (fixed asset write off) assumes _4_ years life of assets written off at _25\% per year for all assets.
Direct Costs include materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 workdays.

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

| Item | Qty/ <br> day | Qty/ <br> Year | @ | Pdn cost/ <br> Yr | UPx | Total/ <br> revenue |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Fish Pickles | 100 | 31,200 | 3.8 | 117,906 | 4 | 124,800 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 400 | 10,400 | 124,800 |
| Less: Production and Operating Costs | 378 | 9,826 | 117,906 |
| Profit | 22 | 574 | 6,894 |

## Market Analysis

The marketability of fish pickles would mostly depend on the quality of the product and the Price. Points of supply would be Supermarkets, Hostels, Fast Food Centres, Canteens, Private and Government establishments like railway stations, the military, etc. Therefore, fish pickles may have a wider market and high demand if the plant is set up.

## Supply of Raw materials and Equipment

Raw materials and Equipments can be procured locally.

## Government Incentives Available

The Government has come out with funds to support development of Aquaculture and small scale investors. This was partly funded by the European Union and funds were at very attractive rates. There are some NGOs that have come out to support the growing of fish because it is very nutritive in terms of proteins and vitamins.

## Agriculture Sector



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 $31,200 \mathrm{kgs}$ per year allowing revenue estimates of US $\$ 31,200$ net profit of $21 \%$ per year having invested US $\$ 4,331$, which is estimated to be recovered with 1 year and 4 months.

## Production Process, Capacity and Technology and

 capital requirementsFruits 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 100 kg daily with output to be increased as demand does increase.

## General Costs (Overheads)

General Costs (Overheads)

| 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 |
| Sub-total | 989 | 11,865 |
| Total Operating Costs | $2,061.62$ | 24,740 |

Project Product Costs and Price Structure in US \$

| Item | Qty/day | Qty/yr | Unit Cost | Pdn cost/r | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Dried <br> Fruits | 100 | 31,200 | 0.8 | 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 |
| Profit | 21 | 538 | 6,460 |

## Market

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. Supply to the military for the fruits to be used as military rations is also necessary for the fruits to capture market.

## Source of Equipment and Raw Materials

Machinery can be fabricated locally by Tree Shade Ltd Mwanga II Kisenyi Kampala or could be imported. Fruits are easily got in the local market all over the country.

## Government Incentives available

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

## Agriculture Sector



DEHULLING OF SESAME SEEDS

## Introduction

Sesame is commonly called simsim and it is predominantly grown in the North, West Nile, Teso, and Kapchorwa sub regions of Uganda. Sesame is used to produce oil used for cooking.
This project is for setting up a plant to de-hull the sesame seeds. Some of the varieties are black with a black coating that gives it a bitter taste and therefore, the seeds must be rid of that covering to render them edible. This black covering has high oxalates content and by dehulling sesame you turn it white coloured, which can be used in various preparation such as sweets, groundnut butter, sweets, powders, chutneys etc. The project requires an estimated fixed capital of US $\$ 3,900$ operating costs of US\$ 142,793 generating total revenue of US $\$ 202,800$ in the first year of operation.

## Production Process

The dark seeds are cleaned by subjecting them to an alkali treatment for a few minutes. The seeds are then washed with cold water to free the product from traces of alkali. The processed seeds are then dried and are white and rid of bitterness and of good nutritive qualities. The removed outer coat has the bitter oxalic acid and the seed is now bereft of fungal infections.
Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Soaking Tank | No | 2 | 100 | 200 |
| Pulper | No | 1 | 1,000 | 1,000 |
| Drier | No | 1 | 1,250 | 1,250 |
| Trays | No | 10 | 35 | 350 |
| Weighing scale | No | 1 | 250 | 250 |
| Furniture \& Fittings | No | - | - | 850 |
| Total |  |  |  | 3,900 |

## Production and Operating Costs

(a)Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost// <br> day | Pdn <br> cost/ <br> month | Pdn <br> Cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Black Coloured <br> sesame | Kgs | 0.4 | 1,000 | 400 | 10,400 | 124,800 |
| Sodium Hydroxide | Kgs | 0.8 | 25 | 20 | 520 | 6,240 |
| Packaging materials | Pcs | 0.4 | 10 | 4 | 104 | 1,248 |
| Sub-total |  |  | 1,035 | 424 | 11,024 | 132,288 |

## General Costs (Overheads)

| Rent | 200 | 2,400 |
| :--- | :--- | :--- |
| Labour | 208 | 2,500 |
| Cleaning and Toiletries | 91 | 1,090 |
| Utilities | 250 | 3,000 |
| Miscellaneous | 45 | 540 |
| Depreciation | 81 | 975 |
| Sub-total | 875 | 10,505 |
| Total Operating Costs | 11,899 | 142,793 |

1) Production costs assumed 312 days per year with daily capacity of producing 1,000kgms of sesame Seeds.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

## Market Analysis

The demand for whiter sesame oil is on the increase on the market. Being plant oil it is healthier as it gives less cholorestal. Sesame oil is used as a cooking medium and in pickles. Restaurants, hotels, fast foods shops, groceries and supermarket chains are the main outlets. Sesame oil has exportable potential especially to the Arab world.

## Project Product Costs and Price Structure

| Item | Qty/Day | Qty/yr | $@$ | Pdn Cost/ <br> yr | UPx | Total <br> Rve |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sesame seeds | 1,000 | 312,000 | 0.46 | 142,793 | 0.65 | 202,800 |

## Profitability Analysis Table in US\$

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 650 | 16,900 | 202,800 |
| Less: Production and Operating Costs | 458 | 11,899 | 142,793 |
| Profit | 192 | 5,001 | 60,007 |

## Government Incentive

The government has come out to encourage any value addition to agricultural produce, therefore this project falls within the government policy. Through Private Sector Foundation Uganda, the government comes out to support enterprises using donor funds for capacity building and consultancies on strategic planning etc.

The equipment needed for this project can be procured locally from Ms Tree Shade 2000, Mwanga II Rd Kisenyi, and Kampala.

## Agriculture Sector



## PRODUCING SIMSIM AND GROUND NUT PASTE

## Introduction

Groundnuts paste is made from grounding fried groundnuts into a paste. The paste is used as a sauce stew to accompany food. It is many times mixed with other sauce or mixed directly into food. It makes soup heavy, and tastes nice. It may also be used or pasted on bread and be used instead of butter. This proposal will produce a safe product using stainless steel machinery unlike the present products produced using cast-iron equipment, which end up laced with materials likely to cause cancer to those eating it. About 250 to 350 kgs of groundnuts can be processed daily. An investment capital of US\$2,768 would sufficiently start up this project. The project is estimated to generate annual revenue of US $\$ 327,600$ with a net profit of $28 \%$

## Production Capacity, Technology and Process

The process begins with the cleaning and sorting of the sun- dried shelled groundnuts. Thereafter, the nuts are fried briefly so that they can make a paste and to give a good taste. It is then put into the grinding machine for processing into a paste and packed in plastic containers.

The process is quite simple and fast and a substantial amount can be processed in a day with modest equipment within a small space.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Stainless Grinding Machine | No | 1 | 1000 | 1000 |
| Sealing Machine | No | 1 | 720 | 720 |
| Furniture | No | 1 | 200 | 200 |
| Weighing Scale | No | 1 | 720 | 720 |
| Bicycle | No | 1 | 72 | 72 |
| Plastic drum | No | 2 | 20 | 40 |
| Ladels | No | 4 | 4 | 16 |
| Total |  |  |  | 2,768 |

## Production and Operating Costs

(a)Direct materials, Supplies and Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn Cost/ <br> day | Pdn Cost// <br> mth | Pdn Cost/ <br> yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Groundnuts | Kgs | 1.65 | 250 | 413 | 10,725 | 128,700 |
| Simsim | Kgs | 1.7 | 100 | 170 | 4,420 | 53,040 |
| Packaging <br> materials | Pcs | 0.43 | 350 | 151 | 3,913 | 46,956 |
| Sub-total |  |  | 700 | 733 | 19,058 | 228,696 |

## General Costs (Overheads)

| Rent | 98 | 1176 |
| :--- | :--- | :--- |
| Labour | 210 | 2,520 |
| Selling and Distribution | 100 | 1,200 |
| Cleaning and Toiletries | 65 | 780 |
| Miscellaneous | 50 | 600 |
| Depreciation | 26 | 312 |
| Sub-total | 549 | 6,588 |
| Total Operating Costs | 19,607 | 235,284 |

1. Production costs assumed 312 days per year with daily capacity of producing 300kgs of paste.
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. Total monthly days assumed are 26 -days.
5. The valuation currency used is United States Dollars.

## Market Analysis

There is a ready market for the paste and outlets are spread all over because this is a house hold item used by all families throughout the year. It is stocked in markets, provisional shops and supermarkets etc.

Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> Cost/yr | UPx | Total <br> Rve |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| G/nut and Simsim <br> Paste | 350 | 109,200 | 2.2 | 235,284 | 3 | 327,600 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 1050 | 27,300 | 327,600 |
| Less: Production and Operating <br> Costs | 754 | 19,607 | 235,284 |
| Profit | 296 | 7,693 | 92,316 |

## Government Facilities and Incentives

The government trades a liberalized policy on trade and commerce. It is in the interest of government for anybody to take up any venture that would add value to agricultural produce where this project falls. There are low interest financial facilities in different institutions that can be accessed by those that suit the prescribed investment lines or parameters.

## Agriculture Sector



## ESTABLISHING A SOYA FLOUR PROCESSING PLANT

## 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 ( $1,000 \mathrm{kgs}$ ) 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, etc. are made from Soya flour by extrusion.

## Plant \& Machinery

Plant and Machinery consists of cleaning equipment SS Tanks, Grinders, Boilers, Weighing scale and packing 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.

## Project Costs in US\$

The Project can be set up as one integrated unit or a cluster of small units. The capital investment for the proposed product mix is estimated at US\$ 11,020.

## Fixed Capital Requirements

Capital Investment: (Fixed) in US\$

| Description | Amount (USD) |
| :--- | :--- |
| Plant \& Machinery | 1,020 |
| Field truck | 10,000 |
| Total Amount | 11,020 |

N.B: The monthly rental charges of a 200 m Room is estimated at 250USD.

## Running Costs (Monthly) in US\$

| Description | Amount (USD) |
| :--- | :--- |
| Raw material (30,000kg) | 22,500 |
| Repair \& Maintenance | 200 |
| Utility (Water, Transport \& power) | 800 |
| Bags (5kg@) | 3,750 |
| Transport | 1000 |
| Labour (4 people) | 400 |
| Rent | 250 |
| Total Amount | 28,900 |

## Project Monthly Revenue:

The estimated daily sales and revenue are shown in the table below:

| Description | Monthly Sales | Price for 5kg pkt <br> (USD) | Revenue |
| :--- | :--- | :--- | :--- |
| Out put | $30,000 \mathrm{~kg}$ | 1.5 | 45,000 |
| W. Capital |  |  | 28,900 |
| Gross Profit |  |  | 16,100 |

## Raw Material Availability

For the proposed product mix 1 ton per day is needed; this translates into 30 tons per month of Soya beans that is 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.
## Agriculture Sector



## 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.

This idea is estimated to yield annual revenue of US $\$ 312,000$ with a net profit margin of $36 \%$ and a payback period of 4 months.

## 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.

## Project Costs

## Capital Investment Requirements in US

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @\$ | 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 |
| Total Amount |  |  |  | 12,900 |

## Operating Costs in US\$

| Item | Units | $@$ | Qty/ <br> day | Prod. <br> cost/day | Prod. Cost// <br> month | Prod. Cost/ <br> Year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
| Direct Costs |  |  |  |  |  |  |
| Soya | Kgs | 0.5 | 1,000 | 500 | 13,000 | 156,000 |
| Sub total | 5 |  |  | 00 | 13,000 | 156,000 |

## General Costs (Over heads)

| 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 |
| Sub - total | 3,699 | 44,384 |
| Total Operating Costs | 16,699 | 200,384 |

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

| Item | Qty/day | Qty/yr | $@$ | Pdn Cost/yr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Flour | 1000 | 312,000 | 0.6 | 200,384 | 1 | 312,000 |

## 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 |
| Profit | 500 | 9,301 | 111,616 |

## Raw Material Availability

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.

## 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.

## Agriculture Sector

Capital investment requirements in US\$

| Item | Unit | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Combined Rice huller | No. | 1 | 3000 | 300 |
| Electric Motor | No. | 1 | 400 | 400 |
| Truck | No. | 1 | 10,000 | 10,000 |
| Weighing scale | No. | 1 | 165 | 165 |
| Total |  |  |  | 10,865 |

## Production \& Operating Cost in US Dollars

Direct Materials, Supplies and Costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Prod. <br> cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. Cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Rice (super) | Kgs | 0.5 | 3,000 | 1,500 | 39,000 | 468,000 |
| Rice (Kaiso) | Kgs | 0.5 | 2,200 | 1,100 | 28,600 | 343,200 |
| Up land rice | Kgs | 0.5 | 2,000 | 1,000 | 26,000 | 312,000 |
| Sub-total |  |  |  |  | 93,600 | $1,123,200$ |

## General costs (Overheads)

| Utilities (power) | 200 | 2,400 |
| :--- | :--- | :--- |
| (Utilities (water) | 20 | 240 |
| Salaries | 400 | 4,800 |
| renting | 200 | 2,400 |
| Depreciation (Assets write off) Expenses | 74 | 888 |
| Sub-total | 894 | 10,728 |
| Total Operating costs | 94,494 | $1,133,928$ |

Production costs assumed are for 312 days per year with a daily capacity of 7,200 kgms per day.
Depreciation (fixed assets write off) assumes 4 years life of assets written off a $25 \%$ per year for all assets.
Direct costs include: materials, supplies and other costs that directly go into production of the products.

## Project Product Cost and Price Structure

| Item | Qty/ <br> day | Qty/yr | $@$ | Prod. Cost <br> /year (\$) | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Rice (super) | 3,000 | 936,000 | 0.5 | 468,000 | 2 | 936,000 |
| Rice (Kaiso) | 2,200 | 686,400 | 0.5 | 343,200 | 3 | $1,029,600$ |
| Up land rice | 2,000 | 624,000 | 0.5 | 312,000 | 1 | 312,000 |
|  |  |  |  | $=$ |  | $2,277,600$ |

Profitability analysis in US\$

| Profitability item | per day | per month | per year |
| :--- | :--- | :--- | :--- |
| Revenue | 7300 | 189800 | $2,277,600$ |
| Rice (Kaiso) | 1,100 | 28,600 | 343,200 |
| Up land rice | 1,000 | 26,000 | 312,000 |
| Less Prod \& Operating Costs | 3,634 | 94,484 | $1,133,808$ |
| Profit | 3666 | 95,316 | $1,143,792$ |

## Market

Locally produced rice has potential to be supplied to both the domestic and foreign markets. Although it is said to compete with imported varieties the demand still outstrips the supply especially with the opening up of the Southern Sudan market. There is also a market to supply to supermarket chains, retailers, wholesalers and the Armed Forces.

## Equipment Suppliers

Agro Sokoni Limited, Plot 15/17 Nassar Road P.O .Box 22793 Kampala. Tel: 0414-257445

Auto Sokoni Limited, Nkurumah Road, Kampala opposite Charm towers.

## Agriculture Sector



## GROWING WATER MELONS

## Introduction

This business idea is aimed at growing and marketing of watermelons. The idea is premised on harvesting 12,000 watermelons per quarter which translates into 48,000 watermelons per year. The revenue potential is estimated at USD 7,200 per quarter, which translates into US $\$ 28,800$ per year. The business has a good market demand throughout the year and can provide employment to the youths and women. The Project cost is about US $\$ 135$, with a net profit margin of $84 \%$.

## Production process

Dig plenty of organic matter into the soil to provide the conditions watermelons need: a light, sandy, fertile loam soil that is welldrained yet retains moisture. Plant Watermelons after both air and soil temperatures have reached $65^{\circ} \mathrm{F}$ usually two to three weeks after the last rainfall. Direct sowing is best if your growing season
is long enough for the plants to mature. For each plant, dig a hole two feet in diameter and a foot deep, and add at least a shovelful of compost or well-cured manure and a trowel or two of bone meal. Set hardened-off transplants into the ground at the depth they were growing in their pots.

Sow seeds an inch deep in hills. Water thoroughly with compost tea. Allow plenty of space between plants. Apply a thick organic mulch to hold in moisture, Remove all covers as soon as flowers appear so that bees and other insects can pollinate the plants, and begin fertilizing with compost tea every three weeks and should be ready to pick about 3 months later.

## Machines \& tools required in US\$

| Item | Unit | Qty | $@$ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Wheelbarrows | No. | 2 | 40 | 80 |
| Hand tools. | No. | 1 | 55 | 55 |
| TC of Machinery |  |  |  | 135 |

## Land requirements:

2acres of land approx. 1,000 US \$

## Production and operating cost for $\mathbf{3}$ months in US\$

| Cost Item | Units | @ | Qty / <br> quarter | Prod. Cost/ <br> Quarter | Prod. <br> Cost/ year |
| :--- | :---: | :---: | :---: | :---: | :---: |
| water melon seeds <br> (250 seeds) | No. | 0.02 | 12,000 | 240 | 960 |
| Poles | No. | 0.3 | 2,200 | 660 | 2640 |
| Chemicals | Kgs | 15 | 3 | 45 | 180 |
| Mulches | bundles | 0.25 | 100 | 25 | 100 |
| Sub-total |  |  |  | 970 | 3,880 |

## General costs (Overheads)

| (Utilities (water) | 15 | 180 |
| :--- | :--- | :--- |
| wages | 20 | 240 |
| Depreciation (Assets write off) Expenses | 2 | 24 |
| Sub-total | 481 | 444 |
| Total Operating costs |  | 4,324 |

## Product cost and Price structure

| Item | Qty /yr | @ | Prod./yr | UPx | TR (\$) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Water melon | 48,000 | 0.55 | 26,400 | 0.6 | 28,800 |

## Profitability analysis in US \$

| Profitability item | per Quarter | per year |
| :--- | :--- | :--- |
| Revenue |  |  |
| water melons | 7,200 | 28,800 |
| Less Prod \& Operating Costs | 1081 | 4,324 |
| Profit | 6,333 | 24,476 |

Market Analysis
There is a growing market for fruits such as watermelon country wide especially in urban areas. Water melons can be supplied to Fruit vendors, markets, hotels, supermarkets, canteens.

## Equipment and raw materials suppliers

All materials and equipments can be obtained from the local market country wide.

## Government Incentives Available

Government has scrapped taxes on Agricultural inputs to boost the agricultural sector. Incentives are also being given to farmers through NAADS Programme.

## Agriculture Sector



## ESTABLISHING AN OIL SEED EXTRACTION PLANT

## Introduction

Seed oil falls under the category of high value products and the demand for it keeps growing. The market size is big as it is used in almost every household. The project idea is designed with an aim of producing 39,000 litres of seed cooking oil with estimated annual revenue of US $\$ 128,700$ in the first year of active operations, a net profit margin of $34 \%$ and a payback period of 1 year and 6 months.

## Production Capacity, Technology \& Process

The production process involves drying and cleaning oil seeds to remove foreign materials like stones, sand and sometimes it is washed to remove dirt. The outer coat is removed through a process called dehulling and then grinded using small motor powered hammer mills. The broken down components are passed through the expeller where they are heated to kill enzymes. The oil collects at the bottom of the expeller and then it is filtered and stored in the storage tank and packaged. The technology used is very simple as it involves drying, cleaning, crushing, heating and filtering

Investment Scale and Capital Requirements Equipment
The investment scale varies according to the intended objectives of the entrepreneur and the production capacity of the equipments used.
Capital Investment Requirements in US\$

| Capital investment item | units | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Moisture tester | No. | 1 | 710 | 710 |
| Huller(Disintegrator) | No | 1 | 900 | 900 |
| Seed Cleaner | No | 1 | 660 | 660 |
| Oil expeller | No | 1 | 800 | 800 |
| Filter press | No | 1 | 3,500 | 3,500 |
| Oil tank | No | 1 | 480 | 480 |
| Weighing scale | No | 1 | 200 | 200 |
| Steam pipeline | No | 1 | 200 | 200 |
| Delivery Van(2.5 tones) | No | 1 | 10,000 | 10,000 |
| Other tools | No | - | - | 3,000 |
| Total |  |  |  | 20,450 |

## Production and Operating Costs

(a)Direct materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost// <br> mth | Pdn <br> cost/yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Seeds (Sunflower, <br> cotton, ground <br> nuts, Soybeans) | Kgs | 0.85 | 189 | 160.65 | 4,177 | 50,123 |
| Packaging <br> materials | Pieces | 0.05 | 48 | 2.4 | 62.4 | 748.8 |
| Other materials | Kgs |  |  |  | 212.5 | 2,550 |
| Sub-total |  |  | 237 | 163.05 | 4,452 | 53,422 |

## General Costs (Overheads)

| Rent | 600 | 7,200 |
| :--- | :--- | :--- |
| Labour | 617 | 7,404 |
| Utilities | 833 | 9,996 |
| Selling \& distribution |  | 0 |


| Cleaning \& Toiletries | 104 | 1,248 |
| :--- | :--- | :--- |
| Miscellaneous expenses | 88 | 1,056 |
| Depreciation | 426 | 5,113 |
| Sub-total | 2,668 | 32,017 |
| Total Operating Costs | 7,120 | 85,439 |

1) Production costs are assumed for 312 days per year with daily capacity of processing 125 litres of seed cooking oil.
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) Total monthly workdays assumed are 26 -days
5) The valuation currency used is United States Dollar

## Market Analysis

The market is wide as oil is a household item with major consumers such as hotels, restaurants, retail \& wholesale shops. The major players in the field include; Mukwano industries ltd, BIDCO and imported oil from USA.
Project product costs and Price Structure

| Item | Qty/ day | Qty/yr | @ | Pdn cost/yr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Seed Oil | 125 | 39,000 | 2.2 | 85,439 | 3.3 | 128,700 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 412.5 | 10,725 | 128,700 |
| Less: Production and Operating Costs | 273.84006 | 7,120 | 85,439 |
| Profit | 138.65994 | 3,605 | 43,261 |

## Government Facilities and Incentives

The office of the Vice president \& the Busiro Development Association are financing such projects plus Uganda Investment Authority; incentives include Vat input refunds on starter up costs.

## Agriculture Sector

## MAKING POULTRY FEEDS

## Introduction

The poultry industry is one of the fastest growing industries in Uganda. The poultry a product especially feeds have a wide market both in urban and rural areas of the country. The Business Idea was developed basing on the need to add value in the agricultural sector with provision of high quality poultry feeds

An estimated fixed capital of US $\$ 23,940$, when invested into the project, can yield an estimated annual revenue of US $\$ 78,000$ from sale of $195,000 \mathrm{kgms}$ of poultry feeds, and 17,971 US\$, from sale of $39,936 \mathrm{kgms}$ of maize flour in the first year of production. The payback period is 2 years and the net profit margin is at $31 \%$.
Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Mixers | No | 1 | 1,250 | 1,250 |
| 10-HP Hammer mill | No | 1 | 1,632 | 1,632 |
| 15-HP Corn Cracker | No | 1 | 2,250 | 2,250 |
| Grain cleaner | No | 1 | 1,000 | 1,000 |
| Corn Grittier | No | 1 | 1,750 | 1,750 |
| Weighing Machine | No | 1 | 408 | 408 |
| Furniture \& Fixtures | Set | 5 | 300 | 1,500 |
| Delivery Van(3tones) | No | 1 | 12,500 | 12,500 |
| Pellet Mills | No | 1 | 800 | 800 |
| Packaging Machine | No | 1 | 850 | 850 |
| Total |  |  |  | 23,940 |

## Production and Operating Costs in US\$



## Direct Costs

| Cereals | Kgs | 0.2 | 176 | 35 | 915 | 10,982 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Oil seeds | Kgs | 0.38 | 72 | 27 | 711 | 8,536 |
| By-Products | Kgs | 0.02 | 482 | 10 | 251 | 3,008 |
| Di-Calcium <br> Phosphate | Kg | 0.15 | 32 | 5 | 125 | 1,498 |
| Packaging <br> Materials | Pcs | 0.75 | 8 | 6 | 156 | 1,872 |
| Other <br> materials |  | - | - | - | 95 | 1,140 |
| Sub-total |  |  | 770 | 83 | 2,253 | 27,036 |

## General Costs (Overheads)

| Labor costs | 750 | 9,000 |
| :--- | :--- | :--- |
| Utilities | 538 | 6,450 |
| Administration expenses | 138 | 1,650 |
| Selling \& distribution | 133 | 1,600 |
| Rent | 750 | 9,000 |
| Fuel | 196 | 2,350 |
| Miscellaneous expenses | 158 | 1,900 |
| Depreciation | 564 | 6,763 |
| Sub-total | 3,226 | 38,713 |
| Total Operating Costs | 5,479 | 65,749 |

1) Production costs assumed are for 312 days per year with daily production of

625 kgs and 128 kgsof poultry feeds and maize flour respectively
2) Depreciation (fixed asset write off) assumes 4 -years life of assets written off a $25 \%$ per year for all assets.
3) Direct costs include: materials, supplies and other costs that directly go into production of the product.
4) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | UnitCost | Pdn <br> cost/yr | Upx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Poultry Feeds | 625 | 195,000 | 0.28 | 54,567 | 0.4 | 78,000 |
| Maize Flour | 128 | 39,936 | 0.28 | 11,182 | 0.45 | 17,971 |
| Total | 753 | 234,936 |  | 65,749 |  | 95,971 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 308 | 7,998 | 95,971 |
| Less:Pdn\&Operating Costs | 211 | 5,479 | 65,749 |
| Profit | 97 | 2,519 | 30,222 |

## Market Analysis

There is wide market for poultry feeds both in rural and urban centers as most of people are embarking on poultry farming since it's a lucrative venture, but there exists large producers of poultry feeds in Uganda and these include: Kagodo Farmers, Ugachick Uganda Ltd and Biyinzika farmers etc. These may be producing at low costs by enjoying the advantages of economies of scale.

## Government Facilities and Incentives

The government is encouraging value addition in the agricultural sector and hence access to the agricultural fund, and European Investment fund can easily be granted.

## Risk certainty

The risk associated with this idea is healthy and safety related issue which can be addressed by employing food scientists.

## Agriculture Sector



## ESTABLISHING A CUPCAKE MANUFACTURING PLANT

## Introduction

The demand for cupcakes is very high all over the country especially in urban centers, Schools, Hospitals and Hotels.

The estimated initial investment for setting up a medium cupcake enterprise is US $\$ 4,905$. This idea is projected to yield annual revenue of US $\mathbf{2 6 8 , 3 2 0}$, with a net profit margin of $32 \%$

## Process

Cupcakes can be baked directly in a patty, often baked in paper cases.

Basic Cupcake Mix;
$50 \mathrm{~g} / 20 \mathrm{z}$ self raising flour
$50 \mathrm{~g} / 20 \mathrm{z}$ Caster sugar (superfine)
$50 \mathrm{~g} / 20 \mathrm{z}$ Butter or margarine (shortening)

## Tools \& Equipments

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

## Capital Investment Requirements

| Capital | Units | Qty | @\$ | Amount \$ |
| :--- | :--- | :--- | :--- | :--- |
| Delivery Cycles | No. | 2 | 800 | 1,600 |
| Mixer | No. | 1 | 2500 | 2,500 |
| Cup cake Pans | No. | 10 | 25 | 250 |
| Gas Cooker | No. | 1 | 500 | 500 |
| Spatula | No. | 1 | 28 | 28 |
| Thermometer | No. | 1 | 20 | 20 |
| Measuring Spoon | No. | 1 | 3 | 3 |
| Measuring Cup | No. | 1 | 4 | 4 |
| Total Amount |  |  |  | 4,905 |

## Production and operating costs



| Direct Costs |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Flour | Kgs | 1 | 500 | 415 | 10,790 | 129,480 |
| Margarine | Kgs | 4 | 5 | 20 | 520 | 6,240 |
| Baking <br> Powder | Kgs | 2 | 2 | 3 | 78 | 936 |


| Eggs | Trays | 3 | 4 | 10 | 260 | 3,120 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sugar | Kgs | 1 | 40 | 52 | 1,352 | 16,224 |
| Sub total |  |  |  | 500 | 13,000 | 156,000 |

## 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 | 102 | 1,224 |
| Sub total | 2,262 | 27,144 |
| Total | 15,262 | 183,144 |

## Project product cost and Price structure

| Item | Qty/day | Qty/yr | @\$ | Pdn Cost/ <br> yr\$ | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cup cakes | 1000 | 312,000 | 0.59 | 183,144 | 0.86 | 268,320 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 860 | 22,360 | 268,320 |
| Less: Production \& Operating Costs | 587 | 15,262 | 183,144 |
| Profit | 273 | 7,098 | 85,176 |

## Government facilities

The incentives available include: low tax rates on some industrial inputs, a liberalized Market, gazetted industrial parks.

## Agriculture Sector



## SETTING UP A POULTRY PROCCESSING PLANT

## Introduction

This project idea is based on the need to add value by processing chicken to reduce the rudimentary form that is dangerous for human consumption. Chicken is widely consumed in many households, hotels, schools and restaurants.
The venture requires capital investments of US $\$ 36,030$, which is anticipated to yield annual revenue of US $\$ 993,720$, with a payback period of 4 months.

## Production Capacity, Technology and Process

The processes involve:
The birds are put in an automated head remover machine. They are transferred to specialise a conveyer which sends them to automated picking machine that pluck the feathers off the birds.
They are then sent to the eviscerating equipment where the birds their insides are cleaned, packed and stored in a chilling machine ready for distribution.

## Capital Investment Requirements

| Item | Units | Qty | Unit cost | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Head Remover | No | 7 | 300 | 2,100 |
| ZD60-80 Un hair machine | No. | 1 | 5,200 | 5,200 |
| Claw removing machine | No. | 1 | 1,800 | 1,800 |
| Eviscerating machine | No. | 1 | 3,750 | 3,750 |
| Chilling machine | No. | 2 | 3,000 | 6,000 |
| Convey belts | No. | 1 | 2,930 | 2,930 |
| Delivery van (Refrigerator) | No. | 1 | 12,000 | 12,000 |
| Other tools | No. | - | - | 2,250 |
| Total |  |  |  | 36,030 |

## Production and Operating Costs

(a)Direct materials, Supplies and Costs

| Cost Item | Units | Unit <br> cost | Qty/day | Pdn cost// <br> day | Pdn cost/ <br> mth | Pdn cost/ <br> yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Chicken birds | Kgs | 6 | 325 | 1,950 | 50,700 | 608,400 |
| Water | liters | 0.2 | 3,205 | 641 | 16,666 | 199,992 |
| Packaging <br> materials | Pieces | 0.15 | 2,000 | 300 | 7,800 | 93,600 |
| Sub-total |  |  | 5,530 | 2,891 | 75,166 | 901,992 |

## General Costs(Overheads)

| Labour costs | 1,200 | 14,400 |
| :--- | :--- | :--- |
| Utilities | 1,000 | 12,000 |
| Administration expenses | 292 | 3,504 |
| Selling \& distribution | 167 | 2,004 |
| Fuel | 200 | 2,400 |
| Miscellaneous expenses | 125 | 1,500 |
| Cleaning and toiletries | 196 | 2,352 |
| Depreciation | 751 | 9,012 |
| Sub-total | 3,931 | 47,172 |
| Total Operating Costs | 79,097 | 949,160 |

Production costs assumed 312 days per year with daily capacity of processing 325 birds.
Depreciation (fixed asset write off) assumes 4 -years life of assets written off at $25 \%$ per year for all assets.
Direct costs include materials, supplies and other costs that directly go into production of the product.
Total monthly days assumed are 26 -days.
The valuation currency used is United States Dollars.

## Project product costs and Price Structure

| Item | Qty/day | Qty/yr | Unit cost | Pdn/yr | Unit <br> price | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Processed <br> Chicken | 325 | 101,400 | 9.4 | 949,160 | 9.8 | 993,720 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 3,185 | 82,810 | 993,720 |
|  <br> Operating Costs | 3,042 | 79,097 | 949,160 |
| Profit | 143 | 3,713 | 44,560 |

## Government Facilities and Incentives

The government has put aside an agricultural fund and there is a European investment fund targeting such areas of investment.

## Agriculture Sector



## MAKING FRUIT CHEESE

## Introduction:

Fruit cheese is a fruit based confectionery containing fruit pulp and cheese, with a high shelf life. Since its taste, and nutritional values are cherished by both the rural and urban population it has a high demand.

The investment cost required for setting a fruit cheese making plant is US $\$ 3295$ yielding estimated revenue of US $\$ 49,920$ annually with production capacity of $31,200 \mathrm{kgs}$ per year. This project is expected to yield a net profit of $53 \%$ in a payback period of seven months.

## Production process

Fruit cheese can be made from any ripe fruit such as: mango, guava, jackfruit and bananas.
The fruit is peeled, cored and pulped.
Sugar along with butter, salt, colour is added and cooked into a thick mass

It is then poured on greased trays and spread.
The mixture is cooled and cut into suitable sizes, wrapped in
polythene films and released to the market.

## Capital investment Requirement in US \$

| Item | Units | Qty | Cost | Total |
| :--- | :--- | :--- | :--- | :--- |
| Pulpier | No | 2 | 750 | 1,500 |
| LPG pressure \& gas cylinder | No | 1 | 620 | 620 |
| Refractometer | No | 1 | 200 | 200 |
| Weighing balance | No | 2 | 300 | 600 |
| Cutters \&knives | No | 1 | 75 | 75 |
| Packing machine | No | 1 | 200 | 200 |
| Trays | No | 10 | 10 | 100 |
| TC of Machinery \& Tools |  |  |  | 3,295 |

Production and Operating costs in US\$Direct materials, supplies and costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost// <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |  |
| Fruits | Kgms | 0.24 | 32 | 7.68 | 199.7 | 2,396 |
| Sugar | Kgms | 1.3 | 3 | 3.9 | 101.4 | 1,217 |
| Butter hydrogenated fat | Kgms | 3 | 10 | 30 | 780 | 9,360 |
| Salt | Kgms | 0.4 | 0.3 | 0.12 | 3.12 | 37 |
| Colour/ flavour | Kgms | 2.59 | 0.16 | 0.4 | 10.7744 | 129 |
| Packaging film | Pkts | 2.3 | 3 | 6.9 | 179.4 | 2,153 |
| Sub-total |  |  |  | 49 | 1274 | 15,292 |


| General Costs (Overheads) |
| :--- |
| Labour 350 4,200 <br> Selling \& distribution 100 1,200 <br> Utilities (Water, power) 75 900 <br> Rent 50 600 <br> Miscellaneous expenses 25 300 <br> Depreciation 69 828 <br> Sub-total 669 8,028 <br> Total Operating Costs 1943 23,320 |
| 1. Production costs assume 312 days per year with daily capacity of $100 \mathrm{Kgs}$. |

Project product cost and Price Structure

| Item | Qty/ <br> day | Qty/yr <br> (\$) | Unit <br> cost | Pdn <br> cost/yr | Unit <br> price | Total <br> rev( $(\$)$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fruit Cheese | 100 | 31,200 | 0.7 | 23,320 | 1.61 | 49,920 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 160 | 4,160 | 49,920 |
| Less: Production and operating costs | 747 | 1943 | 23,320 |
| Profit | 86 | 2,217 | 26,600 |

## Source of Equipment and Materials:

Imported from China and India, but some of the equipment can be fabricated from within by any of the following companies. Tonet Ltd, Kanyanya, Gayaza Rd, Tree Shade Ltd, Mwanga II Rd Kiseny Kampala and John Lugendo \& co Ltd Ndeeba Masaka Rd email lugendojohn07@yahoo.com. Fruits and cheese are available from Luweero, Soroti Mukono, Mbarara, and Masindi all year round.

## Agriculture Sector



ESTABLISHING AN ICE CREAM -BALLS MANUFACTURING PLANT

## Introduction

The demand for Ice cream is all round the year and is consumed by all classes of people. The proposed project envisions setting up of an Ice cream balls manufacturing unit with capital investment of US $\$ 25,250$. This business is estimated to yield annual revenue of US\$ 336,960 with a net profit of $23 \%$ and a payback period of 8 months.

## 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 $\$ 25,250$

## Technology and Process Description

Ice Cream ball is manufactured using cryogenic techniques. Cryogenics process uses liquid Nitrogen to instantaneously freeze Ice Cream balls, to a temperature of $-187^{\circ} \mathrm{C}\left(-304^{\circ} \mathrm{F}\right.$.).

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

Capital Investment Requirement in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Delivery Van | No. | 1 | 8,000 | 8,000 |
| Mixer | No. | 1 | 3,000 | 3,000 |
| Storage Tanks | No. | 3 | 650 | 1,950 |
| Preparation Tanks | No. | 4 | 500 | 2,000 |
| Molding Machine | No. | 1 | 2,000 | 2,000 |
| Q.C Equipments | Set | 1 | 500 | 500 |
| Blender | No. | 1 | 200 | 200 |
| Freezers | No. | 4 | 1,100 | 4,400 |
| Electric Boiler | No. | 1 | 1,000 | 1,000 |
| Packaging Machine | No. | 1 | 2,200 | 2,200 |
| Total Amount |  |  |  | 25,250 |

## Operating Cost in US $\mathbf{\$}$

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. Cost/ <br> Year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Direct Costs

| Milk | Litres | 0.39 | 1000 | 390 | 10,140 | 121,680 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Food Color | Kgs | 0.58 | 50 | 29 | 754 | 9,048 |
| Stabilizers | Kgs | 1.9 | 10 | 19 | 494 | 5,928 |
| Sugar | Kgs | 1.3 | 200 | 260 | 6760 | 81,120 |
| Sub total |  |  |  | 698 | 18,148 | 217,776 |

## General Costs (Over heads)

| 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 | 526 | 6,312 |
| Sub - total | 3,426 | 41,112 |
| Total Operating Costs | 21,574 | 258,888 |

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

| Item | Qty / <br> day | Qty/ yr | @ | Pdn <br> Cost/ yr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Ice Cream Balls | 2000 | 624,000 | 0.41 | 258,888 | 0.54 | 336,960 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 1,080 | 28,080 | 336,960 |
| Less: Production \& Operating Costs | 830 | 21,574 | 258,888 |
| Profit | 250 | 6,506 | 78,072 |

## Sources of Supply of Raw Materials

Dairy products will be locally supplied from farming areas of Uganda especially Western \& Central Uganda.

## Government Facilities Available

The following incentives are available from Government in her bid to promote Agro and Food Processing Industry: Tax exemptions on plant and machinery, infrastructure, grants and long term loans at relatively low interest rates and liberalized market and favorable trade policies.

## Agriculture Sector



## TURKEY PACKING

## Introduction

There is high demand for turkeys during festive seasons from customers such as Supermarkets, Canteens, Universities, Schools, and Hotels that seek for reliable and consistent suppliers..
The business idea for packing turkeys is a very promising venture with a capital investment cost of US $\$ 14,500$ and yielding estimated revenue amounting to US $\$ 116,813$ annually, with a net profit margin of $42 \%$ and a payback period of 1 year and 3 months.

## Process, Capacity and Technology

The birds are obtained from farmers rearing and healthy turkeys are taken to the slaughter house for slaughtering and dressed and dissected. The turkeys are sorted according to sizes and before they are packed, some are cut into pieces for packaging. Some are packed whole, or half or quarter pieces. While others are packed as specific parts of wings, breasts, bulbs, gizzards etc. It could also be packed as de-boned turkey meat.
Capital Investment Requirement in US \$

| Item | Unit | Quantity | Cost | Total |
| :--- | :--- | :--- | :--- | :--- |
| Slaughter Machine | No | 1 | 2500 | 2,500 |
| Defeathering machine | No | 1 | 200 | 200 |
| Guillotine, shelves, computers, | No | 1 | 800 | 800 |
| Refrigerated delivery Van | No | 1 | 8000 | 8,000 |
| Deep freezer | No | 1 | 1500 | 1,500 |
| office chairs/desk | No | 1 | 1000 | 1,000 |
| Parking machine | No | 1 | 500 | 500 |
| TC of Machinery \& Tools |  |  |  | 14,500 |

Production and Operation costs in US\$(a) Direct materials, supplies and costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> mth | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\|l\| l\|l\|$       <br> Direct Costs       <br> Turkeys kgs 10 16 160 4,160 49,920 <br> Packaging <br> boxes Pcs 0.26 16 4.16 108 1,298 <br> Packaging <br> polythene bags Pcs 0.19 32 6.08 158 1,897 <br> Sub-total    170.24 4,426 53,115 |  |  |  |  |  |  |

## General Costs (Overheads)

| Labour | 300 | 3,600 |
| :--- | :--- | :--- |
| Selling \& distribution | 200 | 2,400 |
| Utilities (Water, power) | 188 | 2,256 |
| Rent | 217 | 2,604 |
| Depreciation | 302 | 3,624 |
| Sub-total | 1,207 | 14,484 |
| Total Operating Costs | 5,633 | 67,599 |

1. Production costs assumed 312 days per year with daily capacity of 48 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 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.
Project product cost and Price structure

| Item | Qty/ <br> day | Qty/yr | Unit <br> cost | Pdn <br> cost/yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Packed turkey <br> pieces | 48 | 14,976 | 4.51 | 67,599 | 7.8 | 116,813 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 374.4 | 9,734 | 116,813 |
| Less: Production and operating costs | 217 | 5,633 | 67,599 |
| Profit | 157 | 4,101 | 49,214 |

## Source of Equipment

These can be obtained locally from the fabricators like John Lugendo \& Co Ltd Ndeeba, Masaka Rd, email lugendojohn07@ yahoo.com as well as importing from India or China. Turkeys will be purchased locally from Soroti, Kumi, Katakwi, Bukedea and Kaberamaido and Northern Uganda while starting farm locally.

## Government Incentives available:

Uganda Investment Authority- Provides guidelines on investmen and government incentives, policies and security matters

## Agriculture Sector



## PRODUCTION OF FRUIT SQUASH

## Introduction

Fruits are an important source of energy and vitamins, however due to them being highly perishable and only growing in certain seasons call for a need preservation. The most effective way of preserving fruits is by turning them into squash. Consequently there is a market for a venture process to fruits into a state where by they are readily available.

The establishment of the project is aimed at producing a capacity of 826,800 litres of squash per year with a required capital investment cost of US\$17,623. The project is estimated to generate annual revenue of US $\$ 433,020$, generate a net profit margin of $25 \%$ and a payback period of 4 months.

## Production Capacity, Technology \& Process

The production process is very simple as it involves squeezing,
filtering, boiling and preservation.
Good quality ripe fruits are washed, peeled and cleaned. Then the juice is extracted from fruits and is filtered to remove seeds and
fibres. Then the juice is processed and sterilized and then syrup of sugar preservatives are added and this mixture is stirred till a uniform solution is formed. After, the bottling and packing is done

## Capital Investment Requirements

| Capital investment item | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- |
| Fruit washing tanks | 3 | 200 | 600 |
| Juice extractors (50lts | 2 | 940 | 1880 |
| Steam jacketed Kettles (30ltres) | 2 | 435 | 870 |
| Stirrer | 1 | 328 | 328 |
| Baby boiler (30kgm | 1 | 1,304 | 1304 |
| Bottle washing \& filling machine | 1 | 1,650 | 1650 |
| Testing equipments | 1 | 654 | 654 |
| Furniture | - | - | 435 |
| SS Utensils | - | - | 217 |
| Storage racks | - | - | 260 |
| Delivery Van | 1 | 9,000 | 9,000 |
| Exhaust fans | - | - | 175 |
| Other tools | - | - | 250 |
| Total |  |  | 17,623 |

## Government Facilities \& Incentives

There is a European Investment Fund and an Agricultural Fund which support agro processing industries

## Production and Operating Costs

(a)Direct materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> mth | Pdnc <br> ost/yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Direct Costs

| Fruits | Kgs | 0.3 | 3,200 | 864 | 22,464 | 269,568 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sugar | Kgs | 1.2 | 200 | 240 | 6,240 | 74,880 |
| Preservatives | Kgs | 2.5 | 10 | 25 | 650 | 7,800 |
| Packing <br> materials | Pcs | 0.07 | 1,500 | 105 | 2,730 | 32,760 |
| Sub-total |  |  | 4,910 | 1,234 | 32,084 | 385,008 |

## General Costs(Overheads)

| Labour | 1,096 | 13,152 |
| :--- | :--- | :--- |
| Utilities | 517 | 6,204 |
| Rent | 1,000 | 12,000 |
| Administration expenses | 263 | 3,156 |
| Cleaning \& toiletries | 208 | 2,496 |
| Selling \& distribution | 375 | 4,500 |
| Miscellaneous expenses | 175 | 2,100 |
| Depreciation | 367 | 4,404 |
| Sub-total | 4,001 | 48,012 |
| Total Operating Costs | 36,085 | 433,020 |

## Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | @ | Pdn cost/ <br> yr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fruit Squashes | 2,650 | 826,800 | 0.5 | 433,020 | 0.7 | 578,760 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 1,855 | 48,230 | 578,760 |
| Less: Production \& Operating Costs | 1,388 | 36,085 | 433,020 |
| Profit | 467 | 12,145 | 145,740 |

## Agriculture Sector

## PRODUCTION OF CITRUS PEEL CANDY

## Introduction

Citrus peel candies are processed fruit products that are consumed as packed beverages. The market for processed beverages exists in Uganda with major consumers such as: supermarkets, restaurants, hotels, wholesale and retail shops.

This business idea is to establish a citrus peel candy plant that can produce an estimated output of 3,000 litres of candy with an investment cost of US\$21,590, generating an estimated annual revenue of US $\$ 374,400$, with a net profit margin of $40 \%$ and a payback period of 6 months.

## Production Capacity, Technology \& Process

The production process is simple but takes a number of stages. Fruits such as oranges are collected, washed and rinsed. They are then culled to remove any damages and later graded into fruit sizes The fruits are later passed to the juicing machine where they are squeezed and then passed on to the finisher. Here pulp and seeds are removed using filter sieves strainers.

The filtered concentrate now goes through the blending tanks that measure the natural sugar in the concentrate to ensure that the set sugar standard is reached. After blending, the concentrate is pasteurized to make the juice long lasting. The juice is now passed to the refrigeration room where it's filled into the plastic or cardboard containers through the funnel and packed.

## Capital Investment Requirements in US $\$$

| Capital investment item | Qty | $@$ | Total |
| :--- | :---: | :---: | :---: |
| Fruit washing tanks | 3 | 109 | 327 |
| Culling Egrading machine | 1 | 214 | 214 |
| Juice extractors(50 Ltr capacity) | 2 | 1,200 | 2400 |
| Steam Jacketed Kettles(30Ltrs) | 2 | 470 | 940 |
| Stirrer | 1 | 365 | 365 |
| Baby boiler(30kg capacity) | 1 | 1,250 | 1250 |
| Bottle washing and filling machine | 1 | 1,870 | 1870 |
| Testing equipments | - | 674 | 674 |
| Delivery Van(Refrigerated) | 1 | 12,000 | 12,000 |
| Furniture | - | 510 | 510 |
| Storage tanks | - | 315 | 315 |
| SS Utensils | - | 355 | 355 |
| Exhaust fans | - | 370 | 370 |
| Total |  |  | 21,590 |

## Production and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost// <br> mth | Pdn cost/ <br> yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fruits <br> (Oranges) | Kgs | 0.25 | 1,000 | 250 | 6,500 | 78,000 |
| Sugar | Kgs | 1.2 | 45 | 54 | 1,404 | 16,848 |
| Preservatives | Kgs | 2.6 | 10 | 26 | 676 | 8,112 |
| Packing <br> materials | Pcs | 0.08 | 3,000 | 240 | 6,240 | 74,880 |
| Sub-total |  |  | 4,055 | 570 | 14,820 | 177,840 |

General Costs(Overheads)

| Labour | 1,042 | 12,504 |
| :--- | :--- | :--- |
| Utilities | 471 | 5,652 |
| Rent | 1,000 | 12,000 |
| Administration expenses | 260 | 3,120 |
| Cleaning \& toiletries | 308 | 3,696 |
| Selling \& distribution | 288 | 3,456 |
| Miscellaneous expenses | 200 | 2,400 |
| Depreciation | 450 | 5,400 |
| Sub-total | 4,019 | 48,228 |
| Total Operating Costs | 18,839 | 226,068 |

1. Production costs assumed are for 312 days per year with daily capacity of production of $3,000-250 \mathrm{gms}$ of peel candy.
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. Total monthly days assumed are 26 -days.
5. The valuation currency used is United States Dollars.

## Project Product Costs and Price

| Item | Qty/day | Qty/yr | UP C | Pdn <br> cost/yr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Citrus peel <br> Candy | 3,000 | 936,000 | 0.2 | 226,068 | 0.4 | 374,400 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Mth | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 1200 | 31,200 | 374,400 |
| Less: Production \& Operating Costs | 725 | 18,839 | 226,068 |
| Profit | 475 | 12,361 | 148,332 |

## Government Facilities and Incentives

There is a European Investment Fund and an Agricultural Fund that can be accessed when investing inR the agriculture sector.

## Agriculture Sector



## ACTIVATED CARBON FROM COCONUT SHELL

## Introduction

The activated carbon is widely used for the absorption of toxic gasses and vapors. this product has a good marketability with proper linkages of the manufacturers, and in the sewerage industry.

This business idea is premised on production of into 120,120 tones per year and requires a capital investment of USD 23,790 . The revenue potential is estimated at US $\$ 15,015$ per month, translating into US $\$ 180,180$ per year, with a net profit margin of $29 \%$ and payback period of 1 year 3 months.

## Production Process

The process consists of crushing the coconut shell in a hammer mill to a required size and then pulverizing in a ball mill. The shell powder is digested with zinc chloride. The mass is then activated at elevated temperature. The activated pellets are quenched and leached counter-currently by diluted hydrochloric acid and dried in a tray.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Hammer mill | No | 1 | 4350 | 4350 |
| Pulverriser | No | 1 | 1200 | 1200 |
| Rotary Digester | No | 1 | 2670 | 2670 |
| Pelletzer | No | 1 | 1200 | 1200 |
| Tunnel dryer | No | 1 | 2100 | 2100 |
| Vibrating screens | No | 1 | 790 | 790 |
| Platform type weighing machine | No | 1 | 600 | 600 |
| High pressure steam boilers | No | 2 | 3800 | 7600 |
| Rotary Activation kiln | No | 1 | 415 | 415 |
| Activated carbon storage silo | No | 2 | 240 | 480 |
| Non corrosive materials | set | 1 | 635 | 635 |
| Tank filters press. Etc | No | 1 | 1750 | 1750 |
| Total |  |  |  | 23,790 |

## Production and Operating Costs

## Direct Materials, Supplies and costs USD

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Direct costs |  |  |  |  |  |  |
| Coconut shells | Kgs | 0.3 | 385 | 116 | 3,003 | 36,036 |
| Zinc chloride | Litrs | 1.27 | 50 | 64 | 1,651 | 19,812 |
| Hydrochloric <br> acid | Liters | 3.5 | 30 | 105 | 2,730 | 32,760 |
| Sub-total |  |  | 465 | 284 | 7,384 | 88,608 |
| Rent |  |  |  |  | 150 | 1,800 |
| Labour |  |  |  | 2,000 | 24,000 |  |
| Utilities <br> (power) |  |  |  | 150 | 1,800 |  |
| Other costs |  |  |  |  | 500 | 6,000 |
| Depreciation (Asset write off) Exp |  | 1846 | 5,948 |  |  |  |
| Sub-total |  |  |  |  |  |  |

Production costs assumed 312 days per year with a daily capacity of 385 Kilograms of activated carbon form coconut shells.
Depreciation (fixed asset write off) assumes _4_ years life of assets written off at _25\% per year for all assets.
Direct Costs include: materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 days.

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

| Item | Qty/ <br> day | Qty/Vr | @ | Pdn/ Yr | UPx | $\mathrm{T} /$ rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Activated Carbon | 385 | 120,120 | 1.1 | 128,156 | 1.5 | 180,180 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 577.5 | 15,015 | 180,180 |
| Less: Production \&Operating Costs | 410.8 | 10,680 | 128,156 |
| Profit | 167 | 4,335 | 52,024 |

## Government Facilities and Incentives

There is a European Investment Fund and an Agricultural Fund that can be accessed when investing in the agriculture sector.

## Agriculture Sector



## MAKING TOMATO SAUCE \& PASTE

## Introduction

Tomatoes are used for various culinary preparations and are known to improve taste in sauce or salads. They are widely grown in almost all the areas of Uganda . Therefore, they have a high demand throughout the year.

This business idea is premised on production of 30,004 tins per month which translates into 360,048 packed tines per year. The revenue potential is estimated US $\$ 342,048$ per year with a net profit margin of $64 \%$ and a payback period of 4 months.

## Technology and Process Description:

The process involves selecting ripe tomatoes for preparation of tomato products. The tomatoes are heated in the steam-jacked kettle until they soften, then pressed through a pulping machine to separate the juice from the seeds and skin. Tomato juice is normally bottled or canned.

The manufacture of tomato sauce involves concentration of the juice, addition of juice extracts, salt and then boiling to attain 30oc350 c degrees of concentration. After adding vinegar, which acts as a preservative, the tomato source is bottled for sale.

## Capital Investment Requirements

|  | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Stain steel vessels | No | 2 | 500 | 1,000 |
| Hand operated cup-sealing <br> machine | Set | 1 | 500 | 500 |
| Weighing balance | No | 1 | 230 | 230 |
| Pulping machine | No | 1 | 1,000 | 1,000 |
| Bottle washing Machine | No | 1 | 700 | 700 |
| Crown Corking machine | No | 1 | 800 | 800 |
| Boilers | No | 2 | 800 | 1,600 |
| Delivery van | No | 1 | 8,000 | 8,000 |
| Total |  |  |  | 13,830 |

## Production and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | cost/ <br> day | cost/ <br> month | cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Direct Costs

| Tomatoes | kg | 0.35 | 231 | 81 | 2,102 | 25,225 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Salt | kg | 0.4 | 20 | 8 | 208 | 2,496 |
| Chemicals | kg | 1 | 25 | 25 | 650 | 7,800 |
| Packing materials | No | 0.075 | 1,154 | 87 | 2,250 | 27,004 |
| Corks | No | 0.025 | 1,154 | 28.9 | 750 | 9,001 |
| Spices | kg | 0.75 | 25 | 18.8 | 488 | 5,850 |
| Vinegar | Liter | 1.5 | 25 | 37.5 | 975 | 11,700 |
| Sub-total |  |  | 2634 | 285.5 | 7,423 | 89,076 |

## General Costs(Overheads)

| Utilities (water \$ power) | 250 | 3,000 |
| :--- | :--- | :--- |
| Labour | 1,550 | 18,600 |
| Rent | 750 | 9,000 |
| Preliminary Costs | 100 | 100 |
| Miscellaneous Costs | 100 | 1,200 |
| Depreciation (Asset write off) Exp | 288 | 3,458 |
| Sub-total | 3,038 | 35,358 |
| Total Operating Costs | 10,461 | 124,434 |

## Home <br> The Compendium of Diaspora

Production costs assumed are for 312 days per year with a daily capacity of 1,154 small bottles of tomato sauce; with this business idea, so many different tomato products in different sizes can be produced.
Depreciation (fixed asset write off) assumes 4 years life of assets written off at _25\% per year for all assets.
Direct Costs include: materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 days.

Project Cost and Price Structure in US\$

| Item | Qty/day | Qty/Yr | @ | Pdn <br> cost $/ \mathrm{Yr}$ | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Tomato sauce | 1,154 | 360,048 | 0.3 | 124,434 | 0.9 | 342,048 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 1096 | 28,504 | 342,048 |
| Less: Production and Operating <br> Costs | 399 | 10,369 | 124,434 |
| Profit | 697 | 18,134 | 217,614 |

## Government Facilities and Incentives

There is a European Investment Fund and an Agricultural Fund that can be accessed when investing in the agriculture sector.

## Agriculture Sector



## MAKING ADHESIVE PLYWOOD

## Introduction

Plywood is a common building material that is used to line roofs or as wall or floor paneling. It is also used in furniture manufacturing and it is made by gluing together an odd number of thin layers of wood. Plywood can be made from hardwood or softwood and this determines its use.The building and construction sector would thus form the biggest component of the market for plywood adhesive.The production capacity is 300 pieces per day and estimated revenue is approximated at US $\$ 2,152,800$ per year, a with a net profit margin of $8 \%$ and payback period of 2 months.

## Production process

- Remove the bark from the log and cut logs to the desired length
- steam-heat to soften the surface.
- Make the veneer. This can be done by slicing, or cutting.
- Apply a thin layer of glue to each ply. Lay-up the layers.
- The grain in each layer should be opposite to the adjacent ply.
- Squeeze together the plies using a giant hydraulic press, applying heat and pressure.finish by drying, trimming and sanding.


## Capital Investment Requirements (US\$)

| Capital investment item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Steam Jacketed kettle | No. | 1 | 18,490 | 18,490 |
| Condenser | No. | 1 | 3,900 | 3,900 |
| Receiving Tank (30 HP) | No. | 1 | 22,100 | 22,100 |
| Vacuum pump | No. | 1 | 2,700 | 2,700 |
| Boiler | No. | 1 | 1,300 | 1,300 |
| Total cost on machinery |  |  |  | 48,490 |

## Production and Operating costs (US\$)

| Cost Item | Units | $@ /$ <br> day | Qty <br> day | Pdn cost <br> /day | Pdn cost/ <br> month | Pdn cost// <br> yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Soft wood | mtrs | 3.2 | 500 | 1,600 | 41,600 | 499,200 |
| Glue | Itrs | 6.3 | 70 | 441 | 11,466 | 137,592 |
| Ply | mtrs | 8 | 500 | 4,000 | 104,000 | $1,248,000$ |
| Sub-total |  |  | 1,070 | 6,041 | 157,066 | $1,884,792$ |

## General costs(overheads)

| Utilities(water and power) | 150 | 1,800 |
| :--- | :--- | :--- |
| Labour | 750 | 9,000 |
| Rent | 250 | 3,000 |
| Miscellaneous costs | 1,000 | 12,000 |
| Distribution costs | 520 | 6,240 |
| Depreciation(Asset write off)Expenses) | 1010 | 12,123 |
| Sub -total | 3,680 | 44,163 |


| Total Operating Costs | 160,746 | $1,973,118$ |
| :--- | :--- | :--- |

## Project product costs and Price structures

| Item | Qty / day | Qty/yr | @ | Pdncost /yr | UPx | TR |
| :--- | :--- | :---: | :---: | :---: | :--- | :--- |
| Plywood | 300 | 93,600 | 21 | $1,928,955$ | 23 | $2,152,800$ |

## Profitability Analysis (US\$)

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 6,900 | 179,400 | $2,152,800$ |
| Less production and operating Costs | 6,183 | 160,746 | $1,973,118$ |
| Profit | 717 | 18,654 | 179,682 |

## Raw materials

Sources of raw materials and equipments Raw materials like timber can be obtained from local market like Ms Tonet Ltd, Gayaza Road Kampala

## Agriculture Sector



## 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 $\$ 4,325$ with capacity of $46,800 \mathrm{kgs}$ per year, revenue estimates stand at US $\$ 93,600$ annually and a net profit margin of $72 \%$. 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 150 kgs per day.

## Capital Investment Requirement in US \$:

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Two roll crusher | No | 1 | 1,000 | 1,000 |
| Drying chambers | No | 1 | 800 | 800 |
| Weighing balance | No | 1 | 25 | 25 |
| Cutting and splitting <br> equipment | No | 2 | 1,000 | 2,000 |
| Open vat | No | 1 | 500 | 500 |
| Total |  |  |  | 4,325 |

## Production and Operating costs in US \$

(a)Direct material, supplies and costs

| Cost Item | Units | @ | Qty | Pdn cost/ | Pdn |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Direct Cost | Litres | 5 | 0.64 | 3.2 | 83.2 |
| Banana pseudo stem | Kgms | 0.03 | 321 | 8.01 | 208.3 |
| Chemical | Rolls | 2 | 3 | 4.5 | 117 |
| Paper / Plastic roll <br> stems | packets | 0.4 | 3.2 | 1.33 | 34.65 |
| Polythene bags/ <br> sacks |  | - | - | - | 10 |
| Other materials | - | - | - | 17 | 453.2 |
| Sub-total |  |  |  |  |  |

## General Costs (Overheads)

| Labour | 625 |
| :--- | :--- |
| Selling \& distribution | 150 |
| Utilities | 250 |
| Rent | 350 |
| Administration expenses | 65 |
| Miscellaneous expenses | 150 |
| Depreciation | 163 |
| Sub-total | 1,753 |
| Total Operating Costs | 2,206 |

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.

Project product costs and Price structure inUS \$

| Item | Qty/day | Qty/yr | @ | Pdn cost/yr | UPx |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Banana Fiber | 150 | 46,800 | 0.6 | 26,477 | 2 |

## Profitability Analysis in US\$

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

## Market

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.

## Sources of machinery and Equipment

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.

## Government incentive

Uganda Investment Authority provides guidelines on investment and government incentives, tax holidays and security matters. Industrialists' Associations are allowed in the formulation of government policies on taxes and industries, through Uganda Manufacturers Association (UMA) representation in budget making

## Agriculture Sector



## MAKING DRIED OYSTER MUSHROOMS

## Introduction

Mushrooms are a delicacy among members of society, therefore have a high demand. Areas of focus include restaurants, hotels, and supermarket chains.

Oyster mushrooms are a popular exotic mushroom. They have a delicate texture and just a hint of seafood in their flavor. Originally wild harvested, growing from the side of tree trunks, Oyster mushrooms are now widely cultivated. The total investment requirement is US $\$ 9,272$ per year, with revenue estimates of US $\$ 104,832$ per year, with a net profit of $7 \%$ and a payback period of 9 months.

## Production process

Mushrooms are very perishable and have to be processed to raise their shelf life. Mushrooms are dried ( $12 \%$ moisture) and this keeps away mosquitoes. Dried mushrooms can be stored for more than a year, but there is a change in their taste and flavor. Dried mushroom can be ground to make mushroom soup.A tunnel drier can be constructed from ordinary materials, and it uses less energy than most other driers. A tunnel drier gives a high quality product. Then mushrooms are packed in plastic or foil paper which protects and holds in moisture.

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Tunnel drier | No. | 1 | 272 | 272 |
| Van | No. | 1 | 9,000 | 9,000 |
| Total cost on machinery |  |  |  | 9,272 |

## Production and Operating Costs

| Cost Item | Units | $@ /$ <br> day | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Fresh mushroom | kg | 2 | 50 | 100 | 2,600 | 31,200 |
| Fire wood | Tones | 62 | 2 | 124 | 3,224 | 38,688 |
| Plastic or foil papers | No. | 0.5 | 120 | 60 | 1,560 | 18,720 |
| Sub-total |  |  | 172 | 284 | 7,384 | 88,608 |

## General costs (overheads)

| Utilities(water and power) | 20 | 240 |
| :--- | :--- | :--- |
| Labour | 150 | 1800 |
| Rent | 50 | 600 |
| Miscellaneous costs | 50 | 600 |
| Distribution costs | 260 | 3120 |
| Depreciation(Asset write off) <br> Expenses) | 193 | 2,318 |
| Sub -total | 723 | 8,678 |
| Total Operating Costs | 8,107 | 97,286 |

1. Production costs assumed 312 days per year with a daily capacity of 120 packets of dried oyster mushrooms
2. Depreciation (fixed assets write off) assumes 4 years life of assets written off a $25 \%$ 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 in US \$

| Item | Qty/day | Qty/yr | @ | Pdn cost <br> $/ y r$ | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Dried <br> mushrooms | 120 | 37,440 | 2.6 | 97,286 | 2.8 | 104,832 |

## Profitably Analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 336 | 8,736 | 104,832 |
| Less operating Costs | 312 | 8,107 | 97,286 |
| Profit | 24 | 629 | 7,546 |

## Sources of raw materials and equipments

Raw materials and equipments are locally available

## Government facilities and incentives

The government has set up incentives in a bid to boost agricultural activities.

## Agriculture Sector



## TOMATOE GREEN HOUSE

## Introduction

A green house is a building in which plants are grown. This business idea aims at a production capacity of 110 kgs per day throughout the year assuming a 3 month production cycle annually. The revenue potential is estimated at US $\$ 20,000$ per quarter translating into US\$ 80,000 per year. The total investment capital is US $\$ 53,400$ and a profit of US $\$ 9,080$ per year. The project is expected to yield a net profit margin of $11 \%$ and to have a payback period of 7 months.

## Project Description

The idea involves acquiring and preparation of land, setting up the green house, planting the tomatoes, managing the garden, harvesting the tomatoes when they are ready and marketing the tomatoes.

## Scale of Investment

Capital Investment Requirements in US\$

| Item | Qty | Cost | Total |
| :--- | :---: | :---: | :---: |
| Land | 1 | 4,000 | 4,000 |
| office equipment | 1 | 2,400 | 2,400 |
| Agriculture equipment | 1 | 15,000 | 15,000 |
| Store house | 1 | 10,000 | 10,000 |
| Green house | 1 | 15,000 | 15,000 |
| Cold room | 1 | 5,000 | 5,000 |
| perimeter fence | 1 | 2,000 | 2,000 |
| TC of Machinery |  |  | 53,400 |

## Production and Operating Costs

| Cost Item | Units | @ | Qty/qtr | Pdn cost/ <br> qtr | Pdn cost/ <br> yr |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Direct Costs

| Seedlings | Pkts | 2 | 1000 | 2000 | 8000 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Fertilisers | Sacks | 5 | 20 | 100 | 400 |
| Pesticides | Bottles | 14 | 70 | 980 | 3,920 |
| Sub-total |  |  |  | 3,080 | 12,320 |

## General Costs(Overheads)

| Utilities | 6,000 | 24,000 |
| :--- | :--- | :--- |
| Labour | 3,600 | 14,400 |
| Miscellaneous costs | 600 | 2,400 |
| Depreciation(Asset write off)Exp | 4,450 | 17,800 |
| Sub-Total | 14,650 | 58,600 |
| Total Operating Costs | 17,730 | 70,920 |

1. Production costs assumed are for 366 days per year.
2. Depreciation (fixed asset write off) assumes a 1 years' life of assets written off at $25 \%$ per year for all assets.
3. A production month is assumed to have 30 days.
4. Investment is assumed in 4 quarters a year

## Project Product Costs and Price Structures

| Item | Qty/qtr | Qty/Yr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- |
| Tomatoes (kgs) | 10,000 | 40,000 | 2.00 | 80,000 |
| Total |  |  |  | 80,000 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 222 | 6,667 | 80,000 |
| Less: Production and Operating Costs | 197 | 5,910 | 70,920 |
| Profit | 25 | 757 | 9,080 |

## Market Analysis

Tomatoes are consumed by a big number of people in the county everyday so there market potential is big especially in markets and supermarkets.

## Sources of supply of raw materials

All the raw materials required are locally available in Uganda.

## Government facilities \& incentives available

The government has fixed tax waivers on agriculturalists.

## Risk:

Currently the risks associated with this product are minimal, demand is high and all the ingredients used in making the product can be obtained locally.

## Agriculture Sector



## DEHYDRATED FRUITS AND VEGETABLES

## Introduction

Fruits like grapes, oranges, papaya, mangoes, etc. are largely grown in Uganda. However, they are harvested seasonally resulting in some seasons of relative scarcity. In order to maintain the availability of fruits and vegetables throughout the year, the activity of dehydration is undertaken.

The process of dehydration also helps constitute fruits and vegetables in a hygienic condition. The estimated capital investment US $\$ 5,150$, with revenue estimates of US $\$ 40,560$ per year, with net profit of $38 \%$ and a payback period of 1 year and 3 months.

## Production Process, Capacity and Technology

The process starts with major selection of the fruits and vegetables, and washing them. They are peeled, shelled, sliced, blanched and dehydrated under controlled conditions.

The dehydrated fruits and vegetables are finally packed in suitable containers to avoid moisture absorption. Dehydration of fruits \& vegetables is done by various processes like Traditional Sun Drying, Solar Dryers, Mechanical Dryers, vacuum freeze drying, vacuum drying, Osmotic dehydration, dehydration through explosion puffing and microwave based technique.
The envisaged project has minimum daily capacity of 100 kg per day
Capital Investment Requirement in US \$:

| Item | Unit | Qty | Price | Total |
| :--- | :---: | :---: | :---: | :---: |
| Syrup tank | No | 1 | 500 | 500 |
| Heating vessels | No | 1 | 1000 | 1000 |
| Nylon net | No | 1 | 1000 | 1000 |
| Plastic vats | No | 1 | 1000 | 1000 |
| Cross flow drier | No | 1 | 1,000 | 1,000 |
| Impulse sealer | No | 1 | 150 | 150 |
| Other tools \& equipment | No | 1 | 500 | 500 |
| TC of Machinery \& Tools |  |  |  | 5,150 |

## Production and Operation costs in US\$

(a) Direct materials, supplies and costs

| Cost Item | Units | @ | Qty | Pdn cost | Pdn cost |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |  |
| Fruits | Kgs | 0.3 | 16 | 4.81 | 125 |
| Sugar syrup | Itrs/kgs | 1.1 | 0.8 | 0.88 | 22.9 |
| Citric acid | Ltrs | 36 | 0.32 | 11.54 | 300 |
| Packing material | Kgs | 0.5 | 48 | 24.04 | 625 |
| Sub-total |  |  |  | 41 | $1,072.92$ |

## General Costs (Overheads)

| Labour | 400 |
| :--- | :---: |
| Selling \& distribution | 120 |
| Utilities (Water, power) | 150 |
| Administration | 50 |
| Rent | 100 |
| Miscellaneous expenses | 100 |


| Depreciation | 69 |
| :--- | :---: |
| Sub-total | 989 |
| Total Operating Costs | $2,061.62$ |

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

Project product costs and Price structure in US\$

| Item | Qty/day | Qty/yr | Unit cost | Pdn cost/yr | UPx |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Dehydrated <br> fruits | 100 | 31,200 | 0.8 | 24,740 | 1.3 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 130 | 3,380 | 40,560 |
| Less: Production and operating <br> costs | 80 | 2,084 | 24740 |
| Profit | 50 | 1,296 | 15,553 |

## Market

The market for fruits and vegetables exists and all year round. Supply is bound to increase the returns to investment. Supply is recommended to supermarket chains, grocery shops, main markets, as they can help a lot in capturing a portion of the market. With an increased shelf life for the fruits and vegetables, the profit sales ratio is bound to increase.

## Source of Equipment and Materials

It can be locally made by Tonet Ltd, Kanyanya, Gayaza Rd or imported. Fruits and vegetables are readily available in the local market throughout the country depending on the season.

## Government incentive

Startup costs $25 \%$ granted on actual cost over the first four years in four equal installments.

## Agriculture Sector



## MAKING ACTIVATED CARBON FROM RICE HUSKS

## Introduction

This project is for the production and marketing of activated carbon from rice husks. The activated carbons are widely used for the absorption of toxic gasses. Therefore, this product has a good marketability with proper linkages of the manufacturers, especially in the sugar industry and in the sewerage industry. The revenue potential for this idea is estimated at US $\$ 202,800$ per annum, with a net profit of $50 \%$ and a payback period of 1 year and 2 months.

## Production Process

The process of making activated carbon from rice husks consists of crushing the rice husks in a hammer mill to required size and then pulverizing them in a ball mill. The husk powder is digested with zinc chloride. The mass is then activated at elevated temperature. The activated pellets are quenched and leached counter-currently by diluted hydrochloric acid and dried in a tray drier.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Hammer mill | No | 1 | 4,310 | 4,310 |
| Open pan evaporation steam <br> boiler | No | 1 | 1000 | 1,000 |
| Rotary Digester | No | 1 | 2,000 | 2,000 |
| Plate and frame filler presses | No | 1 | 1,400 | 1,400 |
| Tunnel dryer | No | 1 | 2,200 | 2,200 |
| Vibrating screens | No | 1 | 800 | 800 |
| Treating and setting tanks | No | 1 | 500 | 500 |
| High pressure steam boilers | No | 2 | 4,000 | 8,000 |
| Rotary Activation kiln | No | 1 | 500 | 500 |
| Activated carbon storage silo | No | 2 | 150 | 300 |
| Non corrosive materials | Set | 1 | 600 | 600 |
| Tank filters press. Etc | No | 1 | 1,500 | 1,500 |
| Total |  |  |  | 23,110 |

## Production and Operating Costs in US\$

| Cost Item | Units | @ | Qty/day | Pdn cost | Pdn cost/ <br> month |
| :--- | :--- | :--- | :--- | :--- | :---: |

## Direct costs

| Rice husks | kgs | 0.17 | 385 | 66.605 | 1,732 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Zinc chloride | Ltrs | 1.31 | 50 | 65.5 | 1,703 |
| Hydrochloric acid | Ltrs | 2.3 | 30 | 69 | 1,794 |
| Sub-total |  |  | 465 | 201.105 | 5,229 |

## General costs (Overheads

| Rent | 150 |
| :--- | :--- |
| Labour | 2,000 |
| Utilities(power) | 150 |
| Other costs | 500 |
| Depreciation (Asset write off) Exp | 481.4583 |
| Sub-total | 3,281 |
| Total Operating costs | 8,510 |

1 Production costs assumed 312 days per year with a daily capacity of 500 grams of activated carbon.
3Depreciation (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 US\$

| Item | Qty /day | Qty/ Yr | $@$ | $\mathrm{Pdn} / \mathrm{Yr}$ | UPx |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Activated carbon | 500 | 156,000 | 0.65 | 102,123 | 1.3 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 650 | 16,900 | 202,800 |
| Less production and operating Costs | 327.31 | 8,510 | 102,123 |
| Profit | 322.69 | 8,390 | 100,677 |

## Raw Materials and Equipments

Raw materials like rice husks can be procured locally in Bugiri, Gulu, Mbale, Kasese, and highland rice farmers while equipments can be imported from countries China and Japan.

## Government Incentives Available

There are government organizations like Private Sector Foundation Uganda which serve as a channel through which subsidies and free advisory services can be obtained.

## Agriculture Sector



## CATTLE RAISING

## Introduction

Cattle raising is devoted chiefly to raising and breeding cattle, for beef or dairy products. Cattle have to be handled with a lot of care to avoid diseases. Cattle 'provide beef, milk. Skin, hides, Cheese, decomposed manure (fertilizers) and others. This may normally cost US $\$ 47,849$

## Production Capacity, Technology and Processing

## Description

One acre should contain one animal when supplemented with additional feeds but 100 acres should contain an average of 60 animals.

One acre of land in rural area costs US\$ 600 and in urban areas it costs approximately US $\$ 10,120$ depending on whether it semi urban or urban. It is a small scale investment with capital investment of about US\$ 47,850

## Capital Investment requirements in US\$

| Capital Investment item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Firm House | No. | 2 | 1,500 | 3,000 |
| Paddocks | No. | 5 | 1,200 | 6,000 |
| Firm Equipments | No. | 1 | 861 | 861 |
| Sub-total |  |  |  | 9,861 |
| Land | Acres | 100 | 615 | 60,000 |
| Total |  |  |  | 79,722 |

Direct Materials, Supplies and Costs in US\$

| Cost item | Units | @ | Qty/ <br> day | Cost/ <br> day | Cost/ <br> month | Cost/ <br> 2year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Direct Costs

| Animals | no | 200 | 100 | 0 |  | 20,000 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Feeds (Additional feed) | Kg | 0.5 | 500 | 250 | 6,500 | 91,000 |
| Drugs |  | 1.8 | 5 | 9 | 234 | 2,808 |
| Pesticides | Itrs | 2.5 | 5 | 1 | 90 | 2,160 |
| Subtotal |  | 201 | 600 | 250 | 6,500 | 115,968 |

## General Costs(Overheads)

| Administration expenses | 350 | 8,400 |
| :--- | :--- | :--- |
| Labour | 600 | 14,400 |
| Utilities | 220 | 5,280 |
| Depreciation | 205 | 2,465 |
| Miscelleneous | 150 | 1,800 |
| Subtotals | 1,525 | 32,345 |
| Total operating Costs | 8,025 | 148,313 |

Project Product Costs and Price Structure in US \$

| Item | Qty/day | Qty/year | @ | Prodn/year | UPx | Revenue |
| :--- | :--- | ---: | :--- | ---: | :--- | :--- |
| Animals |  | 100 | 1,483 | 148,313 | 1600 | 160,000 |
| Totals |  |  |  |  |  | 160,000 |

## Profitability Analysis

| Profitability item | Per day | Per month | Per year |
| :--- | ---: | ---: | ---: |
| Revenue | 513 | 13,333 | 160,000 |
| Less:Production \& operating costs | 476 | 12,370 | 148,445 |
| Profit | 37 | 963 | 11,555 |

## Government Facilitates and Incentives Available

There are various Government programms from which this project could benefit and they include: NAADS. There are also extension workers such as veterinary officers that could provide support.

## Agriculture Sector

## 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 400 kgs of Butter every day which will tantamount to 10400 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.

Scale of Investment, Capital Investment Requirements
The total fixed capital investment cost of the project is estimated at USD 42,246.

## Capital Investment Requirements in US

| Item | Units | Qty | @\$ | Amount \$ |
| :--- | :--- | :--- | :--- | :--- |
| Delivery Van | No. | 1 | 6,000 | 6,000 |
| Milk Truck | No. | 1 | 12,000 | 12,000 |
| Cream Separator | No. | 1 | 2,000 | 2,000 |
| Butter Cutter | No. | 1 | 1,600 | 1,600 |
| Churning Machine | No. | 1 | 4,500 | 4,500 |
| Refrigerators | No. | 2 | 700 | 1,400 |
| Milk Tanks | No. | 2 | 400 | 800 |
| Total Amount |  |  |  | 31,000 |

## Operating cost in us \$

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. Cost/ <br> Year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Direct Costs

| Milk | Ltrs | 0.24 | 5,000 | 1,200 | 31,200 | 374,400 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Salt | Kgs | 0.4 | 20 | 8 | 208 | 2,496 |
| Sub total |  |  |  | 1,208 | 31,408 | 376,896 |

General Costs (Over heads)

| 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 |
| Sub - total | 5,445 | 65,350 |
| Total Operating Costs | 36,853 | 42,246 |

## Project product cost and Price structure

| Item | Qty/day | Qty/yr | @ | Pdn Cost/yr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Butter | 400 | 124,800 | 3.4 | 430,560 | 5 | $2,152,800$ |

## Profitability analysis

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 6,900 | 17,900 | $2,152,800$ |
| Less: Production \& Operating <br> Costs | 135 | 3,521 | 42,246 |
| Profit | 6,765 | 14,380 | $2,110,554$ |

## Sources of Supply of Raw Materials

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.

## Government Facilities and Incentives Available

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.

## Agriculture Sector



## MAKING BIO FERTILIZERS

## Introduction

This profile envisages the setting up of a plant that manufactures Bio - Fertilizers. Bio-fertilizer' is a substance which contains living microorganisms which, when applied to seeds, plant surfaces, or soil, colonizes the rhizosphere or the interior of the plant and promotes growth by increasing the supply or availability of primary nutrients to the host plant. Fertilizers directly increase soil fertility by adding nutrients. Bio-fertilizers add nutrients through the natural processes of fixing atmospheric nitrogen, solubilizing phosphorus, and stimulating plant growth through the synthesis of growth promoting substances.

## Production capacity

This plant will be established on the premise of producing 1000 kg of bio-fertilizers per day.

## Scale of Investment, Capital Investment

The total fixed Capital investment cost to start this project is USD 17822

## Market Analysis:

The demand for Bio-fertilizers is spread in almost all agriculture practicing areas in Uganda

## Capital investment requirement in US \$

| Capital Investment Item | Qty | @ | Amount $\$$ |
| :--- | :---: | :---: | :---: |
| Delivery Van | 1 | 6,000 | 6,000 |
| Boiler | 1 | 1,200 | 1,200 |
| Auto Claves | 1 | 3,000 | 3,000 |
| Rotary Shakers | 2 | 150 | 300 |
| Fermenters | 2 | 68 | 132 |
| Hot air Oven | 1 | 1000 | 1000 |
| Air Conditioner | 1 | 900 | 900 |
| Water Distiller | 1 | 1,000 | 1,000 |
| Microscope | 2 | 1200 | 1200 |
| Balances | 1 | 143 | 143 |
| Lab Equipment | 1 | 743 | 300 |
| Refrigerator | 1 | 430 | 743 |
| Laminar air flow | 2 | 45 | 430 |
| Furniture | 1 | 134 | 134 |
| BOD Incubator | 1 | 1,250 | 1,250 |
| Sealing Machine |  |  | 17,822 |
| Total Amount |  |  |  |

## Production and operation costs in US $\mathbf{\$}$

| Item | Units | @ \$ | Qty/ <br> day | Prod. <br> Cost/ <br> day\$ | Prod. <br> Cost/ <br> months | Prod. Cost/ <br> Year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Direct Costs

| Lignite | Kgs | 5.2 | 800 | 4,160 | 108,160 | $1,297,920$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sucrose | Kgs | 4.2 | 100 | 420 | 10,920 | 131,040 |
| Chemical <br> nutrients | Kgs | 3.5 | 100 | 350 | 9,100 | 109,200 |
| Sub total |  |  |  | 3,100 | 80,600 | 967,200 |

## General Costs (Over heads)

| Rent | 500 | 6,000 |
| :--- | :---: | :---: |
| Labour | 800 | 9,600 |
| Utilities (Power \& Water) | 1,500 | 18,000 |
| Repair \& Maintenance | 500 | 6,000 |
| Packaging Materials | 200 | 2,400 |
| Fuel | 1,000 | 12,000 |
| Depreciation (Asset write off) <br> Expenses | 371 | 4,456 |
| Sub - total | 4,871 | 58,456 |
| Total Operating Costs | 85,471 | $1,025,656$ |

## Project Product Costs \& Price Structure

| Item | Qty/ <br> day(kg) | Qty/ year | @\$ | Pdn Cost/ <br> yr\$ | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fertilizers | 1,500 | 468,000 | 3.3 | $1,539,720$ | 4 | $6,158,880$ |

## Profitability Analysis

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 19,740 | 513,233 | $6,158,880$ |
| Less: Production \& Operating Costs | 3,287 | 85,471 | $1,025,656$ |
| Profit | 16,452 | 427,762 | $5,133,224$ |

## Sources of Supply of Raw Materials:

The major supplies are readily available in the Ugandan chemicals and Agro industries.

## Government Facilities and Incentives Available:

The Government has adopted initiatives to support modernization of agriculture through, tax exemptions, basic infrastructure, Grants, and liberalized market.

## Agriculture Sector



## PROCESING COCOANUTS (DESICCATED COCONUTS)

## Introduction

The business idea is for the production and marketing of desiccated coconuts. The dehydrated shredded flesh of coconut known as desiccated coconut is often used as a substitute to grated coconut in food preparations such as curries, cakes, sweets and chutneys. Confectionery and bakery units are the main consumers of desiccated coconut. Desiccated Coconut Powder is obtained by drying ground or shredded coconut kernel after the removal of brown testa. From the survey, it is revealed that coconut products are highly demanded by both the middle class and upper class families residing in cities and towns. The TC for this project is US\$ 156,362 per year with revenue estimated at US 182,520 per year.

## Production Process

The process consists of the removal of coconut shell, de-husking, shelling and paring. The nuts are then washed, disintegrated, dried and packed for the market.

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Disintegrator | No. | 2 | 98 | 196 |
| De-husking and paring tool | No. | 1 | 5,000 | 5000 |
| Sieving machine | No. | 1 | 400 | 400 |
| Grinder | No. | 2 | 250 | 500 |
| Weighing scale | No. | 1 | 300 | 300 |
| Hot air tray | No. | 1 | 4,300 | 4300 |
| Total cost of machinery |  |  |  | 10,696 |

## Production and Operating costs in US\$

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Fresh mature <br> coconuts | kg | 1 | 400 | 400 | 10,400 | 124,800 |
| Sub-total |  |  | 400 | 400 | 10,400 | 124,800 |

## General costs(overheads)

| Utilities(water and power) | 150 | 1,800 |
| :--- | :---: | :---: |
| Labour | 906 | 10,872 |
| Rent | 150 | 1,800 |
| Miscellaneous costs | 50 | 600 |
| Distribution costs | 260 | 3,120 |
| Depreciation(Asset write off)Expenses) | 214 | $2,674.00$ |
| Sub -total | 1,730 | 20,866 |
| Total Operating Costs | 12,130 | 145,666 |

1 Production costs assumed 312 days per year with a daily capacity of 300 packets of desiccated coconuts.

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

| Item | Qty/ day <br> $(\mathrm{kg})$ | Qty/yr | @ | Pdn cost <br> $/$ yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Desiccated <br> Coconuts | 300 | 93,600 | 1.6 | 145,666 | 1.9 | 182,520 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 585 | 15,210 | 182,520 |
| Less production and <br> operating Costs | 466.88 | 12,139 | 145,666 |
| Profit | 118.12 | 3,071 | 36,854 |

## Market Analysis

Desiccated coconuts are on high demand because they are mainly used in bakeries and confectioneries production.

## Sources of raw materials:

Raw materials are locally available.

## Government Facilities and Incentives Available

The government has set up incentives in a bid to boost agricultural sector.

## Agriculture Sector



## MAKING FRUIT BARS

## Introduction

This business idea is for the production and marketing of fruit bars. Fruit bars are made of: mango, guava, pineapple bananas, jackfruit and apples which are nutritious and refreshing. Fruit bars have the same taste with nutritional qualities and are liked by both children and adults. The TR is estimated at US $\$ 499,200$ per year, with production capacity estimated at 500 fruit bars per day. The total investment cost is estimated at US\$399,746.

## Production process

After making pulp, the pulp is mixed with sugar and citric acid which is poured as layers in trays. The pulp is then dried and packed in polyethylene film (food grade) to avoid moisture from entering the product.

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Tray freezer drier | No. | 1 | 1,500 | 1,500 |
| Stainless steel kettle | No. | 3 | 23 | 68 |
| Juice squeezer | No. | 3 | 250 | 750 |
| Weighing balance | No. | 1 | 100 | 100 |
| Packing materials(kg) |  | 500 | 75 | 37,500 |
| Total Costs on Equipments |  |  |  | 39,918 |

## Production and Operating costs in US $\mathbf{\$}$

| Production and Operating costs in |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cost Item | Units | @ | Qty <br> day | Pdn cost <br> /day | Pdn cost/ <br> month | Pdn cost// <br> year |
| Mangoes | Sack | 35 | 1 | 35 | 910 | 10,920 |
| Guava | Sack | 35 | 1 | 35 | 910 | 10,920 |
| Sugar | Kgs | 50 | 20 | 1000 | 26000 | 312,000 |
| Citric acid | Itrs | 3 | 8 | 24 | 624 | 7,488 |
| Sub-total |  |  |  |  | 28,444 | 341,328 |

## General costs(overheads)

| Utilities(water and power) | 100 | 1,200 |
| :--- | :--- | :--- |
| Labour | 150 | 1,800 |
| Rent | 150 | 1,800 |
| Miscellaneous costs | 50 | 600 |
| Distribution costs | 260 | 3,120 |
| Depreciation(Asset write off)Expenses) | 831.625 | 9,980 |
| Sub -total | 1,542 | 18,500 |
| Total Operating Costs | 29,986 | 359,828 |

Production costs assumed 312 days per year with a daily capacity of 500 packets of fruit bars.
Depreciation (fixed assets write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets
Direct costs include materials, supplies and other costs that directly go into production of the product
Project product Costs and Price Structure in USS

| Item | Qty / <br> day | Qty /yr | @ | Pdncost <br> $/$ yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Fruit bars | 500 | 156,000 | 2.3 | 359,828 | 3.2 | 499,200 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 1600 | 41,600 | 499,200 |
| Less production and operating Costs | 1153.29 | 29,986 | 359,828 |
| Profit | 446.71 | 11,614 | 139,373 |

## Market Analysis

Fruit bars have a great market potential in both rural and urban areas. They could be supplied to supermarket chains, parking yards and grocery stores.

## Sources of raw materials:

Raw materials are locally available and equipments can be sourced from Saachi Uganda Limited Luwum Street.

## Government Facilities and Incentives

The government has set up incentives for those who are involved in manufacturing sector as a bid to encourage setting up of small and medium enterprises to create employment.

## Agriculture Sector



GREEN TEA POWDER-MATCHAI

## Introduction

Tea powder is almost used in every household .Green powder tea called matcha is very easy to make and can even be produced at home.

## Production Capacity, Technology \& Process

The production process involves fermenting fresh tea leaves and then drying them. After drying the fermented tea leaves, then they are chopped into small pieces and grinded to a fine powder. Flavours can be added to make it tastier. The project is aimed at producing $131,040 \mathrm{kgms}$ of green powdered tea annually generating TR of US $\$ 220,147$ in the first year of operation. The total operation costs of the project are estimated at US $\$ 153,216$.

Capital Investment Requirements in US\$

| Capital investment item | units | Qty | $@$ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Grinder | No | 1 | 500 | 500 |
| Sealing machine | No | 5 | 150 | 750 |
| Weighing machine | No | 2 | 100 | 200 |
| Filling machine | No | 2 | 400 | 800 |
| Delivery Van | No | 1 | 9,000 | 9,000 |
| Trays | No | 25 | 175 | 4,375 |
| Fermenting materials | No | 10 | 60 | 600 |
| Dark shade | No | 1 | 1,750 | 1,750 |
| Furniture \& Fixture | No | - | - | 2,000 |
| Other tools | No | - | - | 840 |
| TOTAL |  |  |  | 20,815 |

Production and Operation costs in US\$
(a) Direct materials, supplies and costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> mth | Pdncost/ <br> yr |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |  |
| Raw tea leaves | Kgs | 0.75 | 450 | 338 | 8,775 | 105,300 |  |
| Flavors | Kgs | 0.5 | 20 | 10 | 260 | 3,120 |  |
| Packaging <br> materials | Pcs | 0.03 | 1,700 | 51 | 1,326 | 15,912 |  |
| Other materials |  | - | - | - | - | 850 |  |
| Sub-total |  |  | 2,170 | 399 | 10,361 | 125,182 |  |

## General Costs(Overheads)

| Labour | 792 | 9,500 |
| :--- | :---: | :---: |
| Utilities | 125 | 1,500 |
| Selling \& distribution | 292 | 3,500 |
| Cleaning \& toiletries | 115 | 1,380 |
| Rent | 500 | 6,000 |
| Miscellaneous expenses | 79 | 950 |


| Depreciation | 434 | 5,204 |
| :--- | :---: | :---: |
| Sub-total | 2,336 | 28,034 |
| Total Operating Costs | 12,697 | 153,216 |

1) Production costs assumed are for 312 days per year with daily capacity of producing $1,680-250 \mathrm{gms}$ of green tea powder.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars

## Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | @ | Pdn cost/yr | UPx |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Green Tea powder | 1,680 | 524,160 | 0.29 | 153,216 | 0.42 |

Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 706 | 18,346 | 220,147 |
| Less: Pdn \& Operating Costs | 491 | 12,768 | 153,216 |
| Profit | 215 | 5,578 | 66,931 |

## Market Analysis

Green tea powder is not very common on the market therefore when introduced; many people will shift to its consumption. Supplying supermarkets, wholesale and retail shops and selling to individual consumers can be viable though advertisement costs have to be considered as the product is not common on the market so as to increase the sales.

## Government Facilities \& Incentives

Agricultural products value addition is one of the major goals of the government and programs such as "Bonna Bagagawale" can be an intervention program through funding agro processing.

## Agriculture Sector



## AQUACULTURE

## Introduction

Aquaculture is the growing of fish and any other water creatures. It is a foreign culture in our society. There has been a lot of encouragement to local communities to get involved but it has not yet formed grip. However, despite the initial capital outlay, this type of farming would generate some good financial earning to the farmers.

The business risk involved is healthy and safety related risks surrounding the manufacturing and processing. However, this is can be solved by employing food scientists and adhering a strict regime of health and safety.

The Business Idea estimates fixed capital of US $\$ 14,428$ and operating costs of US\$4,576,534 generating revenue of US\$ 295,200 in the first year of operation

## Requirements

This business venture requires land with a permanent swamp preferably owned by the promoter. Construction of ponds is better done by hiring experts in that field. Once ponds are stocked, then you need wheelbarrows, spades, slashers and hoes for day to day operations and a seing net for harvesting.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | total |
| :--- | :---: | :---: | :---: | :---: |
| Land | No | - | - | 1,500 |
| Pond Construction | No | 3 | 4,000 | 12,000 |
| Wheelbarrow | No | 3 | 28 | 84 |
| Spades | No | 4 | 4 | 16 |
| Slashers | No | 10 | 1 | 10 |
| Hoes | No | 5 | 3.6 | 18 |
| Seing Net | No | 1 | 800 | 800 |
| Total |  |  |  | 14,428 |

## Production and Operating Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost/day | Pdn Cost// <br> mth | Pdn Cost/ <br> yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Fingerlings <br> (tilapia) | Pcs | 0.07 | 72,000 | 5,040 | 131,040 | $1,572,480$ |
| Fries (Catfish) | Pcs | 0.2 | 48,000 | 9,600 | 249,600 | $2,995,200$ |
| Fertilizers | Kgs | - | - | - | 83 | 996 |
| Fish feeds | Kgs | 0.52 | 17 | 8.84 | 229.84 | 2,758 |
| Sub-total |  |  | 120 | 14,64 | 380,9 | 4,571 |

## General Costs(Overheads)

| Labour | 225 | 2,700 |
| :--- | :---: | :---: |
| Selling and Distribution | 125 | 1,500 |
| Miscellaneous | 75 | 900 |
| Sub-total | 425 | 5,100 |
| Total Operating Costs | 381,378 | 355,576 |

1) Production costs assumed 312 days per year with daily capacity of fish farming 60,000fish.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars

## Market Analysis

This business proposal does not yield any profits in the first harvest after six months. This is due to a huge excavation cost for quality Ponds that lasts for 60 years. The fish market is readily available because the lake fish is very expensive and scarce since most of it is processed for export. Secondly, the fish skeletons which were being sold to the public after processing for export are also currently exported. Furthermore, aquaculture would be sustained better if the farmers would indulge in poultry and Piggery because their dropping would be of great use in the ponds.

## Project Product Costs and Price Structure

| Item | Period | Out put | $@$ | Pdn Cost/ <br> yr | UPx | Total Rve |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Tilapia | 6-month | 36,000 | 0.16 | 5,760 | 2.3 | 82800 |
|  | Per year | 72,000 | 0.16 | 11,520 | 2 | 144000 |
| Cat-fish | 6-month | 24,000 | 0.16 | 3,840 | 2.6 | 62,400 |
|  | Per year | 48,000 | 0.16 | 7,680 | 3 | 144,000 |
| Total |  | 180,000 |  | 28,800 |  | 433,200 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 1,388 | 36,100 | 433,200 |
| Less: Production and <br> Operating Costs | 1,140 | 29631 | 355,576 |
| Profit | 248 | 33,169 | 77626 |

## Government Participation

The Government has got funds to support development of Aquaculture. Options available include accessing European Union Funds at very attractive rates. There are also some NGOs that have come out to support the growing of fish because fish is very nutritive in terms of proteins and vitamins therefore very good for feeding children to fight malnutrition. It is well aligned with the policy of poverty eradication programme.

## Agriculture Sector



## CULTIVATION AND MARKETING OF FLOWERS

## Introduction:

This business idea is for cultivation and marketing of flowers. Growing flowers is an art - or activity and craft of growing plants, with a goal of creating a wonderful \& beautiful world around. Flowers are a symbol of love, beauty, affection, romance, etc. Flowers have a high economic value both at face value and for extracting perfumes and other products. Flowers are highly demanded especially for personal adornment and decoration. The production capacity per day is estimated at 360 per day with a total investment estimated at US\$ 3794 while revenue is estimated at US\$ 193752 per year.

## Production process

Flowers can be grown in any soil but most soils will be improved by treatment of some sort before planting. Flowers are heavy feeders and thrive best in well worked and well-drained soils. The beds should be prepared 6-12 months prior to planting. If prepared suitably, beds can last along time. Flowers are propagated by seeds, stem or root cuttings, layering, budding and grafting. Propagation by stem cuttings is the most common used method. The seeds are planted in a nursery at intervals of $2.5-5 \mathrm{~cm}$.
The nursery beds are sparingly watered thrice a week and kept clean of weeds. The growing stems are then transferred to the real field in wooden structures.

## Capita investment requirement

| Capital investment item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Water pump | No. | 2 | 80 | 160 |
| Pipes and Fittings | No. | 10 | 200 | 2,000 |
| Water tank | No. | 1 | 152 | 152 |
| Cutter | No. | 5 | 4.8 | 24 |
| pesticide sprayer | No. | 3 | 14 | 42 |
| scissors | No. | 5 | 8 | 40 |
| Barbed wire(roll) | No. | 2 | 48 | 96 |
| Tents | No. | 4 | 280 | 1120 |
| Baskets | No. | 50 | 3.2 | 160 |
| TCs on Equipments |  |  | 790 | 3,794 |

## Production and operating costs

| Cost Item | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdncost/ <br> month | Pdn cost/ <br> yr |
| :--- | :---: | :---: | :---: | :---: | :---: |
| seeds | 1.5 | 20 | 30 | 780 | 9,360 |
| manure | 4 | 50 | 200 | 5,200 | 62,400 |
| Fertilizers | 2.2 | 50 | 110 | 2,860 | 34,320 |
| Chemicals | 2 | 30 | 60 | 1,560 | 18,720 |
| pesticide | 2.3 | 10 | 23 | 598 | 7,176 |
| Sub-total |  | 160 | 423 | 10,998 | 131,976 |

## General costs (overheads)

| Utilities (water and power) | 300 | 3,600 |
| :--- | :--- | :--- |
| Labour | 750 | 9,000 |
| Rent | 150 | 1,800 |
| Administrative cost | 75 | 900 |
| Miscellaneous costs | 50 | 600 |
| Depreciation Expenses | 79.04 | 948.5 |
| Sub -total | 1,328 | 15,938 |
| Total Operating Costs | 12,326 | 147,914 |

Production costs assumed 312 days per year with a daily capacity of 500 bundles of flowers

Depreciation (fixed assets write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets
Direct costs include materials, supplies and other costs that directly go into production of the product.

## Project product cost and Price structure

| Item | Qty/day | Qty/yr | @ | Pdn <br> cost/yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Roses (bundles | 90 | 28,080 | 1 | 28,080 | 1.8 | 50,544 |
| Mums <br> (bundles | 90 | 28,080 | 1 | 28,080 | 1.8 | 50,544 |
| Carnation <br> (bundles | 90 | 28,080 | 1 | 28,080 | 2 | 56,160 |
| Water lilies <br> (bundles | 90 | 28,080 | 1 | 28,080 | 1.3 | 36,504 |
|  |  | 112,320 |  | 162,890 |  | 193,752 |

Profitability analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 621 | 16,146 | 16,146 |
| Less production and operating <br> Costs | 474.1 | 12,326 | 147,914 |
| Profit | 146.9 | 3,820 | 45,838 |

## Agriculture Sector



## 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 $\$ 5,096$ per month translating into US $\$ 61,152$ per annum with a sales margin of $58 \%$ and total investment requirement is US $\$ 3,190$ 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.

## Capital Investment Requirements in US\$

| Capital Investment Item | Qty | @ | Amount |
| :--- | :---: | :---: | :---: |
| Reaction vessel | 1 | 870 | 870 |
| Medium sealing machine | 1 | 320 | 320 |
| Bottle filling machine | 1 | 750 | 750 |
| Storage vessels | 3 | 350 | 1050 |
| Weighing scale. | 1 | 200 | 200 |
| Total |  |  | 3,190 |

## Production and Operating Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Rosin | liter | 0.81 | 30 | 24.3 | 631.8 | 7,582 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Caster oil | liter | 0.85 | 15 | 12.75 | 331.5 | 3,978 |
| Caustic soda | liter | 0.8 | 15 | 12 | 312 | 3,744 |
| Light creosote oil | liter | 0.6 | 50 | 30 | 780 | 9,360 |
| Sub-total |  |  | 110 | 79.05 | 2,055 | 24,664 |

## General Costs (Overheads)

| Rent | 250 | 3,000 |
| :--- | :--- | :--- |
| Labour | 500 | 6,000 |
| Utilities | 100 | 1,200 |


| Transport | 100 | 1,200 |
| :--- | :---: | :---: |
| Preliminary Costs | 100 | 1,200 |
| Miscellaneous Costs | 50 | 600 |
| Depreciation | 66 | 798 |
| Sub-total | 1,166 | 13,998 |
| Total Operating Costs | 3,222 | 38,662 |

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 Structures

| Item | Qty/ <br> day | Qty/ <br> Yr | @ | Pdn <br> cost/Yr | UPx | $\mathrm{T} /$ rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scented Phenyl | 100 | 31,200 | 1.24 | 38,662 | 1.96 | 61,152 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 196 | 5,096 | 61,152 |
| Less: Production and Operating <br> Costs | 124 | 3,222 | 38,662 |
| Profit | 72 | 1,874 | 22,490 |

## 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.

## Supply of Raw Materials and Equipments

Raw materials and machines can be imported from India.

## Agriculture Sector



## MAKING NATURAL FIBRE YARN(ROPES)

## Introduction

This business idea is for the production and marketing of ropes, Ropes prepared by fiber yarn are used for different purposes. The ropes are used in all the sectors of the economy but are most prominent in the agricultural sector. Right from livestock keeping to simple cultivation and then to commercial farming, ropes play a substantial role in the farming processes. Setting up a small plant to make ropes out of fiber yarn using local materials like jute is thus a good entrepreneurial idea. The business idea is premised on the production of 800 ropes per day, 20800 per month and 249600 per year. The revenue potential is estimated at $1,457,664$ US $\$$ per year.

## Production Process

By using sewing machine parts, the yarn is spun, which is operated by sitting on a stool and by simply pedaling the table model sewing machine. The total Operating costs for this project is 227,370 US $\$$ per year

## Capital investment requirement in US\$

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Stool | No. | 10 | 2 | 20 |
| Sewing machine | No. | 1 | 1,200 | 1,200 |
| Yarn twister | No. | 4 | 50 | 200 |
| 4-hole rope maker machine | No. | 4 | 15 | 60 |
| Extruder(900-1000 per min) | No. | 1 | 8,000 | 8,000 |
| TC on machinery |  |  |  | 9,480 |

## Production and operating costs

| Cost Item | Units | @/ <br> day | Qty / <br> day | Pdn <br> cost / <br> day | Pdn <br> cost <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| yarn or, jute | kg | 25 | 25 | 700 | 18,200 | 218,400 |
| Sub-total |  |  | 25 | 700 | 18,200 | 218,400 |

## General costs(overheads)

| Utilities(water and power) | 40 | 480 |
| :--- | :---: | :---: |
| Labour | 100 | 1200 |
| Rent | 100 | 1200 |
| Miscellaneous costs | 50 | 600 |
| Distribution costs | 260 | 3,120 |
| Deprectiation(Asset write off)Expenses) | 197.5 | 2,000 |
| Sub -total | 747.5 | 8600 |
| Total Operating Costs | 19,016 | 227,370 |

1. Production costs assumed 312 days per year with adaily capacity of 800 ropes
2. Depreciation (fixed asset write off) assumes a 4 year life of assests written off at $25 \%$ per year for all assets
3. Direct cost include materials, supplies and other costs that directly go into production

## Project product cost and Price structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn cost <br> /yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ropes | 800 | 249,600 | 0.73 | 182,208 | 0.8 | 145766 |

## Profitability analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 467.2 | 12,147 | 145,766 |
| Less production and <br> operating Costs | 728.75 | 18,948 | 227,370 |
| Profit | 19 | 484 | 5,808 |

## Market analysis

Ropes are highly demanded in various sectors of the economy especially agricultural sector both urban and rural areas.

## Government Facilities and Incentives Available

The government has set up incentives to those who are involved in manufacturing sector as a bid to encourage setting up small and medium enterprise to create employment.

## Source of information on machines

Machines can be purchased from Saachi Uganda Ltd Luwum Street

## Agriculture Sector



## MAKING BAMBOO PRODUCTS

## Introduction

This business idea is for making of bamboo products. Bamboo products are made out of natural resources available in rural areas. The application of bamboo is widely found in making variety of baskets, partitions, candy sticks, trays used in sericulture, etc. The business idea aims at production of 520 units per month which translates into 6240 units annually. The revenue potential is estimated at $\$ 54,600$ per annually with a total capital investment of $\$ 1,465$. The project has an estimated net profit of 14,594 and a payback period 2 years and 7 months.

## Plant capacity

The idea envisages production of 6,240 units annually.

## Production Process

The equipments used are knives and fixtures. Hand tools are also used. The manufacturing process starts with splitting bamboo into thin wafers to suit the variegated needs of the end product. This is followed by manually knitting the split wafers into products especially designed to cater for the needs of the customers.

## Market Analysis

The bamboo products have a ready market both in rural and urban areas. A variety of bamboo products are used for storage of fruits, vegetables and grains etc. There is potential market at: traditional sites, tourist centers, public and private offices, hotels, etc. which would help in promoting this industry.

## Scale of Investment

Capital Investment Requirements in US \$

| Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Knives and fixtures | No | 25 | 22 | 550 |
| Hand tools | No | 30 | 16.5 | 495 |
| Working Tables | No | 3 | 140 | 420 |
| Total |  |  |  | 1,465 |

## Production and Operating Expenses in US\$

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost// <br> month | Pdn <br> Cost/ <br> Year1 |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |

## Direct costs3:

| Bamboo Sticks | No | 0.18 | 400 | 72 | 1,872 | 22,464 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sub-total |  |  |  |  | 1,872 | 22,464 |

## General costs (Overheads)

| Salaries and Wages | 280 | 3,360 |
| :--- | :---: | :---: |
| Electricity | 120 | 1,440 |
| Water | 250 | 3,000 |
| Transportation Expenses | 200 | 2,400 |
| Consumable stores | 85 | 1020 |
| Selling and Distribution | 90 | 1080 |
| Administrative expenses | 150 | 1,800 |
| Repairs | 55 | 660 |
| Shelter | 210 | 2,520 |
| Depreciation (Asset write off) Expenses | 22 | 261.6 |
| Sub-total | 1,462 | 17,542 |
| Total Operating Costs | 3,334 | 40,006 |

1. Production is assumed for 312 days per year
2. Depreciation assumes 4 year life of assets written off at $25 \%$ per year for al assets
3. A production Month is assumed to have 26 days.

## Project Product Costs and Price Structure in\$

| Item | Qty / <br> day | Qty/ <br> yr | @ | Pdn <br> Cost / <br> yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Small Baskets | 12 | 3,744 | 6 | 19,223 | 6.5 | 24,336 |
| Medium Baskets | 7 | 2,184 | 6 | 9,612 | 7 | 15,288 |
| Large baskets | 6 | 1,872 | 6 | 9,612 | 8 | 14,976 |
| Total | 25 | 7,800 | 18 | 40,006 | 21.5 | 54,600 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 175 | 4,550 | 54,600 |
| Less: Production and Operating <br> Costs | 128 | 3,334 | 40,006 |
| Profit | 47 | 436 | 14,594 |

## Agriculture Sector



## MAKING SISAL FIBRE HANDICRAFTS

## Introduction

This business idea is for production of sisal fibre handicrafts. Sisal fibre extracted from sisal leaves is used for making many types of decorative items, bags, wall hangings and toys. The products from sisal are normally appealing in tourist places, hotels and restaurants with a business risk is competition from other manufacturer thus need for proper management and control of the business. The business idea aims at production of 1,300 pieces of fibre handicrafts. The revenue potential is estimated at US\$ 524,160 per year with a net profit margin $7 \%$. The total capital investment for the project is US $\$ 1,260$.

## Plant Capacity

The profiled plant has a minimum capacity of 50 units per day.

## Technology and Production Process

Sisal leaves are cut and fibre extracted through a Raspador machine. After washing in water and subsequent drying, the leaves are 'beaten' to remove undesired particles. The dry fibre is used for making braids, which are dyed and made into attractive handicrafts

## Scale of investment

## Capital Investment Requirements

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Raspador Machine | No | 1 | 750 | 750 |
| Hand tools | No |  | 510 | 510 |
| Total |  |  |  | 1,260 |

## Production and Operation costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost/ <br> month | Pdn <br> Cost/ <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct costs3:

| Crude Petroleum <br> Jelly | Kgs | 8 | 129 | 1032 | 26,832 | 321,984 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Oils | Litres | 3.5 | 7 | 24.5 | 637 | 7,644 |
| Scented ingredients | Kgs | 8 | 1 | 8 | 208 | 2,496 |
| Wax | Kgs | 2.5 | 2 | 5 | 130 | 1,560 |
| Packaging materials | Pieces | 0.05 | 721 | 36.05 | 937 | 11,248 |
| Sub-total |  |  |  |  | 28,744 | 344,932 |

## General costs (Overheads)

| Labour | 700 | 8,400 |
| :--- | :---: | :---: |
| Other materials | 1000 | 12,000 |
| Utilities | 1500 | 18,000 |
| Administrative expenses | 1500 | 18,000 |
| Selling and Distribution | 3250 | 39,000 |
| Fuel | 3000 | 36,000 |
| Miscellaneous expenses | 700 | 8,400 |
| Depreciation (Asset write off) Expenses | 26.25 | 315 |
| Sub-total | 11676.25 | 140,115 |
| Total Operating Costs | 40,421 | 485,047 |

1. Production is assumed for 312 days per year.
2. Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
3. A production Month is assumed to have 26 days

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

| Item | Qty /day | Qty/ yr | @ | Pdn/yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bags | 70 | 21,840 | 22 | 485,047 | 24 | 524,160 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1680 | 43,680 | 524,160 |
| Less: Production and <br> Operating Costs | 1555 | 40,421 | 485,047 |
| Profit | 125 | 3,259 | 39,113 |

## Sources of supply of raw materials and equipments

 All equipments and raw materials can be got in Uganda.
## Market Analysis

As the handicrafts made of sisal fibre are elegant and cost effective, the market for sisal fibre is promising and attractive especially in urban and semi-urban areas. The sisal handicrafts also enjoy export potential.

## Agriculture Sector



## MAKING DECORTICATED CASHEWNUT

## Introduction

This business idea is for Production and marketing of edible cashew nuts, the business idea is premised on production of $6,680 \mathrm{kgs}$ of cashew nuts per month which translates into 56160 per year. The revenue potential is estimated at US\$ 5408 per month, translating into 64896 per year. The project cost is US $\$ 64,896$

## Production Process

In the mechanized system, the raw cashew nuts are decorticated using a hand operated machine, mounted on a work table. The decorticator splits the nut when placed between two horizontally mounted blades, especially spread to suit the contour of the raw nut. The outer shell is conveniently split by sliding and splitting action of blades. An operator can process $25-30 \mathrm{~kg}$ nuts per day.

## Production Capacity

The plant can have a capacity 9000 kgs per year

## Land Requirement

Rent for a year would cost about 1,200 US Dollars
Capital investment requirement in US \$

| Item | Unit | Quantity | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Cashew <br> Decorticator | No. | 1 | 1,000 | 1,000 |
| Other equipments | No. | 1 | 100 | 100 |
| Delivery van | No. | 1 | 2,500 | 2,500 |
| TC of Machinery |  |  |  | 3,600 |

Production and operating costs in US \$

| Cost Item | Units | @ | Qty/ <br> day | Prod. <br> cost/day | Prod. <br> cost/ <br> month | Prod. <br> cost/ year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cashew nuts | Kgs | 0.6 | 300 | 180 | 4,680 | 56,160 |
| Sub-total |  |  |  |  | 6,680 | 56,160 |

## General costs (Overheads)

| Utilities (power) | 15 | 180 |
| :--- | :---: | :---: |
| Utilities (water) | 15 | 180 |
| Salaries | 60 | 720 |
| Rent | 75 | 900 |
| Depreciation (Assets write off) Expenses | 75 | 900 |
| Sub-total | 240 | 2,880 |
| Total Operating Costs | 6,920 | 59,040 |

Project cost

| Item | Qty/ <br> day | Qty/yr | @ | Prod. <br> Cost/year | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| cashew nuts | 320 | 99,840 | 0.5 | 49,920 | 1.3 | 64,896 |

## Profitability analysis in US\$

| Profitability item | per day | per month | per year |
| :--- | :--- | :--- | :--- |
| Revenue |  |  |  |
| Cashew nuts | 208 | 5,408 | 64,896 |
| Less Prod \& Operating Costs | 189.2 | 4,920 | 59,040 |
| Profit | 18.8 | 488 | 5,856 |

## Market

Cashew nuts are highly demanded on the world market. Local market also exists although cashew nuts are not very common in all the areas of Uganda. This could turn out to be the turning factor in the marketing of cashew nuts as they have an open market, with limited competition.

## Government Incentives

Government is encouraging small scale business that would provide employment to natives by giving them funds, subsidies and land.

## Equipment Suppliers

Equipment can be imported from Asia and Europe

## Agriculture Sector



## ESSENCE EXTRACTION FROM

 CURRY LEAVES
## Introduction

This business idea is for essence extraction from curry leaves. Essence adds flavor and taste to food. For one to enter the market, it is recommended that $s /$ he targets supplying to supermarket chains, grocery/retail shops and restaurants. The business idea aims at production of 46,800 bottles of essence annually. The revenue potential is estimated at US $\$ 702,000$ annually. The total capital investment for the project is US $\$ 4,700$.

## Plant Capacity

The profiled plant has a minimum capacity of 150 vials per day and this is an output of a single 8-hour work shift.

## Technology and Production process

Essence is extracted from the curry leaves with the essence extractor or distillation set then the liquid is filled in bottles and sealed. The room should be moist to conserve the fresh curry leaves.

## Scale of investment

Capital Investment Requirements in US\$

| Capital Item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Distillation Set | No | 1 | 1000 | 1,000 |
| Working bench | No | 10 | 370 | 3,700 |
| Total |  |  |  | 4,700 |

## Production and Operating Costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn Cost/ <br> day | Pdn cost// <br> mth | Pdn Cost/ <br> Year1 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct <br> costs3: |  |  |  |  |  |  |
| Fresh curry <br> leaves | Kgs | 1.8 | 1,000 | 1,800 | 46,800 | 561,600 |
| Packaging <br> materials | Pcs | 0.07 | 100 | 7 | 182 | 2,184 |
| Subtotal |  |  |  |  | 46,982 | 563,784 |

## General costs (Overheads)

| Labour | 300 | 3,600 |
| :--- | :--- | :--- |
| Utilities | 400 | 4,800 |
| Selling and Distribution | 100 | 1,200 |
| Administrative expenses | 100 | 1,200 |
| Shelter | 100 | 1,200 |
| Depreciation (Asset write off) <br> Expenses | 97.92 | 1,175 |
| Sub-total | 1,098 | 13,175 |
| Total Operating Costs | 48,080 | 576,959 |

Production is assumed for 312 days per year.
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
A production Month is assumed to have 26 days.

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

| Item | Qty/ / <br> day | Qty/yr | Unit <br> cost | Pdn/yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Essence Bottles | 150 | 46,800 | 12.33 | 576,959 | 15 | 702,000 |

## Profitability Analysis Table in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 2,250 | 58,500 | 702,000 |
| Less: Production and Operating Costs | 1,849 | 48,080 | 576,959 |
| Profit | 401 | 10,420 | 125,041 |

## Government facilities and Incentives

The government encourages agro-based investments because they add value. The tax policy is quite favorable for the industrialists e.g. if you export, you enjoy reimbursement tax.

## Market analysis

The essence extraction from curries' leaves is a rural micro enterprise activity and has good demand in domestic as well as international market. Areas of concentration would include restaurants, hotels, retail/grocery stores and tourist centers.

## Sources of Supply of equipments

All equipments can be got in Uganda

## Scale of investment

## Capital Investment Requirements

| Capital Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Working table |  | 6 | 220 | 1,320 |
| Scissors |  | 5 | 6 | 30 |
| Brushes |  | 5 | 4 | 20 |
| Needles | sets | 7.5 | 6 | 45 |
| Other equipments |  | 1 | 165 | 165 |
| Total |  |  |  | 1,580 |

## Production and Operation costs in US\$

| Cost <br> Item | Units | Unit <br> cost | Qty/day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> Year1 |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct costs3:

| Beads | Kgs | 5 | 4 | 20 | 520 | 6,240 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Shells | Kgs | 3 | 8 | 24 | 624 | 7488 |
| Stones | Kgs | 1 | 5 | 5 | 130 | 1560 |
| Horns |  | 3 | 5 | 15 | 390 | 4680 |
| Sand <br> paper |  | 5 | 2 | 10 | 260 | 3120 |
| Strings | Mtr | 0.75 | 10 | 7.5 | 195 | 2340 |
| Metals |  | 0.5 | 10 | 5 | 130 | 1560 |
| Subtotal |  |  |  |  | 2,249 | 26,988 |

## General costs (Overheads)

| Salaries and wages | 300 | 3,600 |
| :--- | :--- | :--- |
| Utilities | 250 | 3,000 |
| Selling and Distribution | 100 | 1,200 |
| Administrative expenses | 180 | 2,160 |
| Rent | 100 | 1,200 |
| Depreciation (Asset write off) Expenses | 54 | 648 |
| Sub-total | 984 | 11,808 |
| Total Operating Costs | 3,233 | 38,796 |

Production is assumed for 312 days per year.
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
A production Month is assumed to have 26 days.

Project Product Costs and Price Structure

| Item | Qty / <br> day | Qty/yr | Unit <br> Cost | Pdn/yr | Unit <br> Price | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bead jewelry | 100 | 31,200 | 1 | 14,400 | 0.5 | 15,600 |
| Metal Jewelry | 50 | 15,600 | 12.0 | 187,200 | 2 | 31,200 |
| Shell jewelry | 50 | 15,600 | 0.44 | 6,864 | 1 | 15,600 |
| TOTAL | 200 | 62,400 | 13 | 38,796 | 2.75 | 62,400 |

## Profitability Analysis Table in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 200 | 5,200 | 62,400 |
| Less: Operating Costs | 122 | 3,182 | 38,796 |
| Profit | 322 | 8,382 | 23,604 |

## Market

The market for jewels is constant throughout the year and could include the following; beauty shops, market places, street vending places, work places, homesteads, salons and tourist places.

## Suppliers of Materials and Equipment

All the materials and equipment can be sourced locally and are readily available since this does not require sophisticated technology.

## Trade Sector

## SHOCK ABSORBER RECONDITIONING

## Introduction

Shock absorbers are essential items for smooth riding of any automobile. Their basic function is to absorb any shocks to ensure a comfortable ride and better control of the vehicle/automobile. With the high number of automobiles in Uganda and noting the state of most of Uganda's roads, the rate at which shock absorbers are replaced is high. The project cost is US $\$ 12,740$, capacity of 4,000 per year giving US $\$ 13,978$ as revenue in a year.

## Production Process, Capacity and Technology

Shock absorbers are opened and checked for oil passage and required pressure. The dirt is removed and fresh oil is filled after replacing rubber bushes and seals.

The profiled plant has a minimum capacity of reconditioning 4,000 shock absorbers per annum but this can be increased as a bigger customer base is captured.

## Capital investment Requirement in US\$.

| Capital Investment Item | Units | Qty | @ |
| :--- | :---: | :---: | :---: |
| Oil fired tilting furnace | No | 1 | 1,000 |
| Weighing balance | No | 2 | 30 |
| ladle \& tongs | No | 2 | 15 |
| Hand moulding equipment | No | 1 | 1,200 |
| Bench grinder | No | 1 | 80 |
| Mixing Machine | No | 1 | 500 |
| TC of Machinery \& Tools |  |  |  |

## Production and Operation costs in US\$

| Cost Item |  |  |  |  |  | Units | @ | Qty | Pdn <br> cost |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |  |  |  |
| Used shock absorbers | Pcs | 0.25 | 12.82 | 83.3 |  |  |  |  |  |
| lubricating oil and fluids | Itrs | 6 | 0.32 | 50 |  |  |  |  |  |
| Rubber bushes/seals | pkts | 13 | 0.06 | 22 |  |  |  |  |  |
| Packaging material | Itrs | 1 | 1.6 | 42 |  |  |  |  |  |
| Sub-total |  |  |  | 197 |  |  |  |  |  |

General Costs (Overheads)

| Labour | 300 |
| :--- | :---: |
| Selling \& distribution | 200 |
| Utilities (Water, power) | 70 |
| Administration | 20 |
| Rent | 150 |
| Miscellaneous expenses | 100 |
| Depreciation | 25 |
| Sub-total | 865 |
| Total Operating Costs | 1,062 |

Project product costs and Price Structure

| Item | Qty/day | @ | UPx | TR |
| :---: | :---: | :---: | :---: | :---: |
| Shock absorbers | 12.8 | 3.19 | 3.5 | 13,978 |

Profitability Analysis Table in US\$

| Profitability Item | Per day | Per month |
| :--- | :--- | :--- |
| Less: Production and operating costs | 41 | 1,062 |
| Profit | 4 | 103 |

## Market

The market is mainly from existing vehicles for reconditioning the shock absorbers. The used shock absorbers can be reconditioned and used, which costs less than a quarter of the Price of a new set. It would also be recommended to liaise with automobile dealers.

## Source of machinery and raw materials

Some have to be imported and others could be locally made by Tonet Ltd, Kanyanya Gayaza Rd or John lugendo and Co Ltd, Ndeeba Masaka Rd email lugendojohn07@yahoo.com. Used shock absorbers can be locally sourced cheaply from all garages in the country.

## Government incentive:

Repairs and minor capital equipment $100 \%$ granted on actual cost incurred in a year. Private sector foundation Uganda has grants for SMEs to develop capacity.

## Trade Sector



FOOD VENDING

## Introduction

This business idea involves preparing different kinds of foodstuffs. The food is prepared and served to people at their work places. The various local dishes prepared include: Matooke, groundnuts, beef stew, rice, sweet potatoes, beans, cassava, peas chicken and greens.
The business risk involved is healthy and safety related risks surrounding the manufacturing and processing. The business idea is premised on production of 130 plates of food per day which translates into 3,380 plates of food per month and 40,560 plates per year. The revenue potential is estimated at US $\$ 85,800$ per year and net profit margin $27 \%$.

## Production process

Raw food stuffs are procured from the market and processed through various preparations then cooked using either a charcoal stove or firewood. Various additions can be added through frying the sauce to add flavor.

## Capital Investment Requirements in US \$

| Capital investment item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Chairs and tables | No. | 300 | 14 | 4,200 |
| Charcoal stove (big size) | No. | 5 | 40 | 200 |
| Table | No. | 2 | 20 | 40 |
| Saucepans | No. | 10 | 50 | 500 |
| Utensils (Plates,cups ,spoons, <br> knives) | No | 400 | 150 | 60,000 |
| Washbasins | No | 4 | 2 | 6 |
| TC on equipment |  |  |  | 64,946 |

## Production and Operating Costs in US $\mathbf{\$}$

| Cost Item | Units | $@$ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Charcoal | sacks | 10 | 2 | 20 | 520 | 6,240 |
| Matooke | Bunches | 8 | 3 | 24 | 624 | 7,488 |
| Beans | kg | 1.3 | 3 | 3.9 | 101.4 | 1,217 |
| Rice | kg | 1.12 | 7 | 7.84 | 203.84 | 2,446 |
| Kalo | kg | 1 | 4 | 4 | 104 | 1,248 |
| G. nuts | kg | 1.6 | 3 | 4.8 | 124.8 | 1,498 |
| Meat | kg | 4 | 8 | 32 | 832 | 9,984 |
| Peas | kg | 2.4 | 2 | 4.8 | 124.8 | 1497.6 |
| Greens | Bundles | 0.2 | 2 | 0.4 | 10.4 | 124.8 |
| Chicken | No. | 8 | 4 | 32 | 832 | 9,984 |
| Salt | gms | 0.2 | 250 | 50 | 1300 | 15600 |
| Sub-totals |  |  |  | 184 | 4,777 | 57,327 |

## General costs(overheads

| Utilities (water and power) | 100 | 1,200 |
| :--- | :---: | :---: |
| Labour | 100 | 1,200 |
| Rent | 100 | 1,200 |
| Miscellaneous costs | 50 | 600 |
| Depreciation(Asset write off) Expenses | 1,000 | 12,000 |
| Sub -total | 1,350 | 16,200 |
| Total Operating Costs | 6,127 | 73,527 |

1, Production costs assumed 312 days per year with a daily capacity of 130 plates of food.
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 Prices Structures\$

| Item | Qty / <br> day | Qty/yr | $@$ | Pdn cost <br> $/ y r$ | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Plate of food with <br> chicken | 30 | 9,360 | 1.5 | 14,040 | 2.5 | 23,400 |
| Plate of food with <br> beef | 100 | 31,200 | 1.2 | 37,440 | 2 | 62,400 |
| TC | 40,560 |  |  |  | 85,800 |  |

## Profitability Analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 275 | 7,150 | 85,800 |
| Less production and operating <br> Costs | 235.7 | 6,127 | 73,527 |
| Profits | 39.3 | 1,023 | 12,273 |

## Market Analysis

The market for this business consists of people who are not able to prepare food because of their commitments at their work place. The food will be vended in different places like workplaces, markets, building sites and bus stages.

## Government Facilities and Incentives

Uganda is a liberalized economy and trading is quite free as long as you are within the confines of the law.

## Trade Sector



## ESTABLISHING A WAY-SIDE RESTAURANT

## Introduction

There is high demand for food and beverages in Uganda. Any attempt in establishing a modern restaurant can prove to be a profitable business especially when it's located in a good area. The establishment of this project requires a total fixed cost of US $\$ 16,300$, and operating costs of US\$ 98676, generating revenue of US\$ 242,040 in the first year of operation.

## Production Capacity, Technology \&Process

The production process involves preparation of food, beverages and snacks.

## Capital Requirements \& Equipment

The investment scale basically depends on the desired objectives of the entrepreneur. However, the following equipment can be used in the project establishment.
Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | @ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Fridges | No | 3 | 400 | 1,200 |
| Cutlery | Sets | 60 | 20 | 1,200 |
| Furniture | No | - | - | 1,000 |
| Cooking Equipments | No | - | 500 | 500 |
| Music System, TV \& Computer | No | 3 | 500 | 1,500 |
| Blenders, food warmers, juice | No | 6 | 150 | 900 |
| mixers \&flasks |  |  |  | 250 |
| Delivery Van | No | 1 | 7,000 | 7,000 |
| Bouquet set | Sets | 2 | 350 | 700 |
| Gas and water tanks | No | - | - | 500 |
| Decoration materials, empty <br> crates | No | - | - | 550 |
| Standby generator | No | 1 | 800 | 800 |
| Other equipments |  | - | - | 200 |
| Total |  |  |  | 16,300 |

1) Production costs assumed 312 days per year with daily capacity of selling 130 plates of food, 150 bottles of beverages $\& 80$ cups of tea.
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) Total monthly days assumed are 26-days.

## Production and Operating Costs

(a)Direct Materials, Supplies and Costs $\$$

| Cost Item | Units | Unit | Qty/ | Pdn <br> cost/ | Pdn <br> cost/ | Pdn <br> cost/ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  | day | month | Year |
| Food Items | Bchs | - | - | 80 | 2,080 | 24,960 |
| Sauce Items | Kgs | - | - | 70 | 1,820 | 21,840 |
| Beverages | Cts | - | - | 50 | 1300 | 15,600 |
| Spices, Cooking oil, <br> Sugar etc (seasonings) | Kgs | - | - | 30 | 780 | 9,360 |
| Other materials |  |  | - | 6 | 156 | 1,872 |


| Sub-total |  |  | - | 236 | 6,136 | 73,632 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| General Costs (Overheads) |  |  |  |  |  |  |
| Labour |  |  |  |  | 300 | 3,600 |
| Utilities |  |  |  |  | 400 | 4,800 |
| Gas \& Charcoal |  |  |  |  | 200 | 2,400 |
| Uniforms |  |  |  |  | 35 | 420 |
| Cleaning \& Toiletries |  |  |  |  | 100 | 1,200 |
| Rent |  |  |  |  | 500 | 6,000 |
| Miscellaneous expenses |  |  |  |  | 100 | 1,200 |
| Depreciation |  |  |  |  | 452 | 5,424 |
| Sub-total |  |  |  |  | 2,087 | 25,044 |
| Total Operating Costs |  |  |  |  | 8,223 | 98,676 |

Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | $@$ | Pdn cost/ yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Foods | 150 | 47,400 | 1.7 | 79,560 | 3 | 142,200 |
| Beverages | 150 | 46,800 | 0.4 | 18,720 | 1.6 | 74,880 |
| Tea | 80 | 24,960 | 0.8 | 19,968 | 1 | 24,960 |
| Total |  | 119,160 |  | 98,676 |  | 242,040 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 775.8 | 20,170 | 242,040 |
| Less: Pdn \& Operating Costs | 316.3 | 8,223 | 98,676 |
| Profit | 459.5 | 11,947 | 143,364 |
|  |  |  |  |

## Market Analysis

The market readily exists as food products are consumed by everybody \& combined with outside catering services. T he business can be a viable venture.

## Government facilities and incentives

Generally, there are no set government incentives on restaurants but prosperity for all programs can be an intervention program.

## Trade Sector



MOBILE FOOD VENDING

## Introduction

This proposal is production and mobile vending of food. About 200 covers would be produced daily. The Project costs are US $\$ 16,450$ and estimated revenues stand at US $\$ 93,600$ per year. 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.

## Capital Investment Requirement in US \$

| Item | Units | Qty | Price | Total |
| :--- | :--- | :--- | :--- | :--- |
| Distribution vans | No | 2 | 7,000 | 14,000 |
| cooking pans | No | 10 | 30 | 300 |
| Warmers | No | 10 | 38 | 380 |
| Plates | No | 150 | 2 | 300 |
| Glasses | No | 150 | 0.8 | 120 |
| Cutlery | No | 200 | 1 | 200 |
| Dish washer, wipers, trays, <br> serviettes, stuck buckets | No | 1 | 1,150 | 1,150 |
| TC of Machinery \& Tools |  |  |  | 16,450 |

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.

## 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 services.

## Source of Equipment and Materials:

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

## Government:

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

## Production and Operating cost in US \$

(a)Direct materials, supplies and costs

| Cost Item | Units | Unit <br> cost | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Direct Costs |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Food stuffs (rice, posho, potatoes, cassava and bananas). | Kgms | 2 | 30 | 60 | 1,560 | 18,720 |
| Cooking oil | Itres | 2 | 1 | 1.5 | 39 | 468 |
| sauces (meat, chicken, gnuts, beans, greens, peas, etc) | Kgms | 5 | 25 | 50 | 1,300 | 15,600 |
| Spices, onions, tomatoes | Kgms | 2 | 5 | 10 | 260 | 3,120 |
| Drinks | crates | 1 | 10 | 10 | 260 | 3,120 |
| Sub-total |  |  |  | 131.5 | 3,419 | 41,028 |
| General Costs (Overheads) |  |  |  |  |  |  |
| Labour |  |  |  |  | 600 | 7,200 |
| Selling \& distribution |  |  |  |  | 100 | 1200 |
| Utilities (Water, power) |  |  |  |  | 70 | 840 |
| Rent |  |  |  |  | 100 | 1,200 |
| Miscellaneous expenses |  |  |  |  | 50 | 600 |
| Depreciation |  |  |  |  | 260 | 3,120 |
| Sub-total |  |  |  |  | 1,180 | 14,160 |
| Total Operating Costs |  |  |  |  | 4,599 | 55,188 |

## Project product costs and Price structure

Project product costs and Price structure

| Item | Qty/ day | Qty/ year | @ | Pdn cost/yr | UPx | TR |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Food | 200 | 62,400 | 1 | 55,188 | 1.5 | 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 | 176.8846 | 4,599 | 55,188 |
| Profit | 123 | 3,201 | 38,412 |

## Trade Sector



## MAKING EXPANDED PET PRE-FOAMS FOR PACKAGING

## Introduction

This project is for manufacturing and marketing of Expanded Pet pre-foams. Foam nets are preferred over conventional packaging materials due to their merits. They are mainly used for packaging glass bottles, medicine and electronic instruments.

The business idea is premised on production of 2002 rolls per month which translates into 24,024 rolls per year, with a capital investment of US $\$ 35,100$ The revenue potential is estimated at US $\$ 96,096$ per year with a net profit margin of $24 \%$ and a payback period of 3 years 6 months.

## Production Process

LDP along with additives like blowing agent, talcum powder, etc. are mixed in the blender. This mixture is fed into the hopper of the extruder where the molten substance is mixed with Freon gas to provide smooth \& glassy surface and strength. The extruded LDPE passes through a multi hole double rotation and expands.
LDPE foam nets are pulled out by drawing machine and trimmed by pneumatic device. The nets are dropped into stainless steel container smoothly and continuously, from where they are removed packed and sent to the market.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Mixer | No | 1 | 3,000 | 3,000 |
| Extruder Screw diameter | No | 1 | 2,800 | 2,800 |
| Multi hole double rotating die | No | 1 | 2,700 | 2,700 |
| Drawing and cutting unit | No | 1 | 24,000 | 24,000 |
| Freon gas supply System | No | 1 | 2,000 | 2,000 |
| Blender | No | 1 | 600 | 600 |
| Total |  |  |  | 35,100 |

## Production and Operating Costs

Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct Cost

| Low Density <br> Polythene | rolls | 0.8 | 50 | 40 | 1040 | 12,480 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Resin | liter | 2.5 | 20 | 50 | 1300 | 15,600 |
| Freon gas | liter | 2.2 | 10 | 22 | 572 | 6,864 |
| Talcum powder | KG | 2.4 | 10 | 24 | 624 | 7,488 |
| Sub-total |  |  | 90 | 136 | 3,536 | 42,432 |

## General Costs(Overheads)

| Rent | 240 | 2,880 |
| :--- | :--- | :--- |
| Labour | 850 | 10,200 |
| Utilities | 140 | 1,680 |


| Preliminary costs | 100 | 1,200 |
| :--- | :--- | :--- |
| Transport Costs | 230 | 2,760 |
| Miscellaneous costs | 250 | 3,000 |
| Depreciation (Asset write off) Exp | 731 | 8,775 |
| Sub-total | 2,541 | 30,495 |
| Total Operating Costs | 6,077 | 72,927 |

1. Production costs assumed 312 days per year with a daily capacity of 77 rolls of Expanded Pet Pre-foams
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

| Item | Qty/day | Qty/Yr | @ | Pdn <br> cost/Vr | UPx | T/rev |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Expanded Pet <br> Pre-Foam | 77 | 24,024 | 3 | 72,927 | 4 | 96,096 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 308 | 8,008 | 96,096 |
| Less: Production and Operating Costs | 234 | 6,077 | 72,927 |
| Profit | 74 | 1931 | 23,169 |

## Supply of Raw materials and Equipments

Raw materials can be procured locally or imported from Kenya while Equipments may also be imported from China and Japan.

## Government Incentives Available

Government has put up Organizations like Private Sector Foundation Uganda which serve as a channel through which subsidies and free advisory services are provided to investors.

## Trade Sector



## MANUFACTURING METALIC FASTENERS

## Introduction

Belt fasteners are used widely in industries manufacturing suit cases, travel bags, apparel belts, shoes etc. They could be manufactured in different sizes and designs depending on the demand. The unit would make the buckles for the belts as well as the shoes in different varieties. The variety may include double wire lock buckle, oval shape shoe buckle, square pronged buckle, rectangular buckle among others. There are however no standard set up for these items since the designs, size, and material are constantly changing due to the market demand.

## Production Capacity, Technology and Process

The manufacturing process involves the use of two types of machines which include a power press as well as hand press on one hand and a hook making machine on the other. The mild steel plate of gauge 19/20 is cut into strips of appropriate size using a
bench shearing machine. The sheared plate is then punched out using a power press, and finally, fly presses are used to mould and smoothen the article. The produced article goes through the electroplating plant to give it the final desired coloring or look which may be chrome, golden, silver etc. The established setup would produce about 2,500 pieces of fasteners of different sizes a day thus 780,000 per year. The Revenue Potential is estimated at 234,000 per year. The net profit margin is at $51 \%$.

Investment Scale, Capital Requirements and Equipment The investment scale depends on the project set objectives.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Treadle Shearing Machine | No | 1 | 1,500 | 1,500 |
| Special purpose hook making <br> machine | No | 1 | 500 | 500 |
| 15 tone power press | No | 1 | 3,000 | 3,000 |
| Fly press No.1 | No | 3 | 1,000 | 3,000 |
| Electroplating Plant | No | 1 | 1,000 | 1,000 |
| Total |  |  |  | 9,000 |

Direct Materials, Supplies and Costs in US\$
Production and operation Costs

| Cost Item | Units | $@$ | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost/ <br> Mth | Pdn <br> cost/ <br> yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Mild Steel Plates <br> (gauge 19/20) | Pcs | 63 | 4 | 252 | 6,552 | 78,624 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Steel Wires | Roll | 40 | 0.50 | 20 | 520 | 6,240 |
| Other materials |  | - | - |  | 167 | 2,000 |
| Sub-total |  |  | 5 | 272 | 7,239 | 86,864 |

## General Costs (Overheads)

| Labor | 400 | 4,800 |
| :--- | :--- | :--- |
| Rent | 500 | 6,000 |
| Utilities | 600 | 7,200 |


| Administrative expenses | 150 | 1,800 |
| :--- | :---: | :---: |
| Selling and distribution | 260 | 3,120 |
| Miscellaneous expenses | 125 | 1,500 |
| Depreciation | 188 | 2,250 |
| Sub-total | 2,223 | 26,670 |
| Total Operating Costs | 9,461 | 113,534 |

1) Production costs assumed 312 days per year with daily capacity of producing 2,500 belt fasteners.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

## Market Analysis

The market for fasteners is readily available as there are many small scale establishments engaged in the production of items that would use these products. Currently these items are imported. Their absence may contribute to failure to manufacture belts locally. Thus, this is a venture likely to stimulate other items to be produced. They could be exported to our neighbors especially Kenya where their use is more pronounced.

Project Product Costs and Price Structure in US\$

| Item | Qty/day | Qty/yr | unit <br> Cost | Pdn <br> Cost/yr | UPx | T/Rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fasteners | 2,500 | 780,000 | 0.146 | 113,534 | 0.3 | 234,000 |

Profitability Analysis table

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 750 | 19,500 | 234,000 |
| Less: Production \&Operating Costs | 364 | 9,461 | 113,534 |
| Profit | 386 | 10,039 | 120,466 |

## Government Facilities and Incentives

The Income tax Act 1997 allows a $25 \%$ charge on start up costs spread over years and the government has set up liberalized trade and commerce policies.

## Trade Sector



## MAKING WAX CANDLES

## Introduction

Candles are cylindrical structures made of wax and are used for illumination purposes. Their market structure is relatively high since they are used in hotels, households, churches and for decorative purposes. They are available in ordinary, fancy shapes and various sizes. The business idea aims at production of 14,612 wax candles per month which translates into 175,344 wax candles per year. The revenue potential is estimated at US\$ 1,753 per month, translating into US\$ 21,041 per year with a sales margin of $20 \%$. The total investment capital for this project is US $\$ 17,586$.The demand for this product.

## Production Capacity

The production capacity for the project depends on the size of a mould used. For example, a medium mould can produce 70 wax candles per hour and a single 8 -hour working shift per working day produces 562 candles. But in a period of one month the machine can produce 14,612 wax candles and each candle costs at a minimum US\$0.075-0.15)

## Technology and Process Description:

The Equipments used are simple and can be fabricated locally. It Includes: Aluminum mould, charcoal stove, knife, saucepan and firewood. The process involves wax and satiric acid which are melted in a mild steel mould. The wick is inserted in the candle moulding machine and the molten mass is poured in the cylindrical mould and it is cooled by water and poured on the floor. When completely dry, the wick threads are trimmed and then packed.

## Scale of Investment, Capital Investment requirements

 and equipment:The scale of investment depends on the market available, but most especially the manufacturer produces on orders

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Candle moulds | No | 2 | 80 | 160 |
| Charcoal Stove | No | 2 | 55 | 110 |
| Weighing machine | No | 1 | 160 | 160 |
| Packing Machine | No | 1 | 150 | 150 |
| Total |  |  |  | 580 |

## Production and Operating Costs

Direct Materials, Supplies and Costs
Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Wax | Kgs | 3 | 7 | 21 | 546 | 6,552 |
| Satiric acid | Liters | 4 | 2 | 8 | 208 | 2,496 |
| Wick length | Rolls | 3 | 1 | 3 | 65 | 780 |
| Sub-total |  |  |  | 32 | 819 | 9,828 |

## General Costs (Overheads)

| Rent | 60 | 720 |
| :--- | :--- | :--- |
| Labour350 | 4,200 |  |
| Utilities (Charcoal) | 25 | 300 |
| Other costs (Transport costs, \& others) | 200 | 2,400 |
| Deprecation (Asset write off) Exp | 11.46 | 137.52 |
| Sub-total | 646.46 | 7,758 |
| Total Operating Cost | 1,465 | 17,586 |

Production costs are assumed for 312 days per year with a daily capacity of 562 wax candles.
Depreciation (fixed asset write off) assumes 4 years life of assets written off at 25\% per year for all assets
Direct Costs include: materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 days

Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/Yr | Unit <br> cost | Pdn/Yr | Unit <br> Price | $\mathrm{T} /$ rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wax candles | 562 | 175,344 | 0.08 | 17,550 | 0.12 | 21,041 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 67.4 | 1,753 | 21,041 |
| Less: Production and Operating Costs | 56.4 | 1,466 | 17,586 |
| Profit | 11 | 288 | 3,455 |

## Market Analysis

The market for candles is available throughout the year both in rural and as urban areas.

## Government Facilities and Incentives Available:

The government has put up youths training projects to improve on their skills in candle making and there are Non Government Organizations based in Kampala and Pader districts which support people with capital for making wax candles.

## Trade Sector



## MANUFACTURING OF FISHING HOOKS

## Introduction

Modern fishing hooks are used in fishing of large fish such as Nile perch, fishing in ponds and wells etc.
The investment in this project requires a certain big amount of capital, but the payback period is short. An estimated fixed capital of US $\$ 53,023$ and operating costs of US $\$ 123,094$, when invested can generate estimated revenue of US $\$ \mathbf{2 8 3 , 9 2 0}$, in the first year of operation. The net profit margin for this project is $57 \%$. And the pay pack period is estimated at 1 year 8 month.

## Production Capacity, Technology and Process

The production technology involves heating a hook material to exact temperature that is perfect for that particular style and then molded depending on the size, and design. The hot hook is then cooled in oil. After cooling, then sharpening of the finished hook is done using sharpening fabricating machines.

Investment Scale, Capital Requirements and Equipment The investment scale depends on the set goals and objectives of the project.

The capital requirements and equipment needed is as indicated in the table below.
Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Supermax TCM-V56T | No | 1 | 37,904 | 37,904 |
| Fabrication tools | No | - | - | 3,000 |
| Furniture and Fittings | No | - | - | 3,600 |
| Delivery Van | No | 1 | 6,019 | 6,019 |
| Other Tools | No | - | - | 2,500 |
| Total |  |  |  | 53,023 |

## Production and Operating Costs

(a)Direct Materials, Supplies and Costs in

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Carbon Steel | Kgs | 15.5 | 7 | 108.5 | 2,821 | 33,852 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bronze | Kgs | 6 | 9 | 54 | 1,404 | 16,848 |
| Aluminum | Kgs | 4.7 | 5 | 23.5 | 611 | 7,332 |
| Other materials | Kgs | 2 | 4 | 8 | 208 | 2.496 |
| Packaging materials | Pcs | 0.07 | 260 | 18.2 | 473 | 5,678 |
| Sub-total |  |  |  | 212.2 | 5,517 | 66,830 |

## General Costs(Overheads)

General Costs(Overheads)

| Labour costs | 1,021 | 12,252 |
| :--- | :---: | :---: |
| Utilities | 1,113 | 13,356 |
| Administration expenses | 300 | 3,600 |
| Selling \& distribution | 125 | 1,500 |
| Rent | 750 | 9,000 |
| Fuel | 150 | 1,800 |
| Miscellaneous expenses | 125 | 1,500 |
| Depreciation | 1,105 | 13,256 |
| Sub-total | 4,689 | 56,264 |
| Total Operating Costs | 10,206 | 123,094 |

1) Production costs assumed are for 312 days per year with daily capacity of producing 260 pieces of fishing hooks.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars

## Market Analysis

The market for fishing hooks widely exists since the fishing industry in Uganda is a vibrant one contributing to about 10\% of the GDP.

Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> cost/ <br> yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Modern Fishing <br> Hooks | 260 | 81,120 | 1.5 | 123,094 | 3.5 | 283,920 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 910 | 23,660 | 283,920 |
| Less: Production \& Operating Costs | 394 | 10,258 | 123,094 |
| Profit | 515 | 13,402 | 160,826 |

## Government Facilities and Incentives

The government is trying to modernize the fishing industry and any investment targeted towards that direction can be funded using the "Bonna Bagagawale" program and the European Investment Fund

## Trade Sector



## PLASTIC BRICKS

## Introduction

The business idea is for making and marketing of plastic bricks. This business idea is premised on production of 13,000 plastic bricks per month which translates into 156,000 plastic bricks per year. The revenue potential is estimated at US $\$ 13,000$ per month which translates into US $\$ 156,000$ per year. The project cost is US $\$$ 12,743.

## Production Process

The process involves filling and compacting soil in mineral water bottles. After compacting, the bottles are then sealed with bottle caps.
Capital investment requirements in US\$

| Item | Unit | Quantity | $@$ | TC |
| :--- | :---: | :---: | :---: | :---: |
| Hoes | No. | 5 | 4 | 20 |
| Spades | No. | 5 | 4 | 20 |
| Wheelbarrow | No. | 2 | 30 | 60 |
| TC of Machinery |  |  |  | 100 |

## Production and Operating Costs in US\$

## Direct Materials, Supplies and Costs

| Cost Item | Units | $@ /$ <br> day | Qty/ <br> day | Prod. <br> cost/ <br> day | Prod. <br> cost// <br> month | Prod. <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| soil | Tones | 20 | 1 | 20 | 520 | 6,240 |
| Plastic bottles | No. | 0.02 | 500 | 10 | 260 | 3120 |
| Sub-total |  |  |  |  | 780 | 9,360 |

## General costs (Overheads)

| Utilities (water) | 10 | 120 |
| :--- | :---: | :---: |
| Salaries | 120 | 1,500 |
| Rent | 100 | 1,200 |
| Depreciation | 1.9 | 22.8 |
| Sub-total | 231.9 | 3,383 |
| Total Operating costs | 1011.9 | 12,743 |

Production assumed 312 days per year with a daily capacity of 500 plastic bricks. Depreciation (fixed assets write off) assumes 4 years life of assets write off of 25\% per year
Direct costs include: materials, supplies and other costs that directly go into production of the product

Project Product Cost and Price Structure in US\$

| Item | Qty/ <br> day | Qty/yr | @ | Prod. <br> Cost / <br> year | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plastic bricks | 500 | 156,000 | 0.5 | 12,743 | 1 | 156,000 |

## Profitability Analysis in US \$

| Profitability item | per day | per <br> month | per year |
| :--- | :--- | :--- | :--- |
| Revenue |  |  |  |
| Plastic bricks | 500 | 13,000 | 156,000 |
| Less Production \& Operating Costs | 40.8 | 1061.9 | 12,743 |
| Profit | 459.2 | 11,938 | 143,257 |

## Market

Plastic bricks making is still a new idea on market, but the bricks are believed to be long lasting for a period of 100 years if used. They are suitable when constructing in wetlands. The idea will also help government and local authorities to reduce on plastic waste and protect the environment.

## Trade Sector



## CROCHETING AND EMBROIDERY IN UGANDA

## Introduction

This business idea is for production and marketing of products such as: Sweaters, Sleeveless/ Waist Coats, Shawls Socks, Table Clothes and Embroidery on Caps, Jackets, Shirts, Gifts and more. The business idea is premised on production of various products with a revenue potential of US $\$ 80,093$ per month which translates into US $\$ 961,116$ per year. The project cost is US 27,050 Dollars.

## Process Description

The person knitting needs to have a Knitting Machine. The Burbins are loaded with threads, and then they start knitting. For Embroidering, a mult-head embroidering machine is loaded with thread in their burbins; embroidering is done according to the desired computerized image or picture.

## Capital Investment Requirements in US\$

| Capital Item | Units | Qty | @ |
| :--- | :---: | :---: | :---: |
| Sewing machine | No | 1 | 80 |
| Multi head Embroidery Machine | No | 1 | 15000 |
| Delivery van | No | 1 | 3000 |
| Embroidery Design Shop software | No | 1 | 100 |
| Hand tools | No | 5 | 52 |
| Total |  |  | 18,232 |

## Production and Operation Costs In US \$

## Direct Materials, Supplies and Costs

Production costs assumed 312 days per year with a daily capacity of 2,551 products.
Depreciation (fixed assets write off) assumes 4 years life of assets write off at $25 \%$ per year for all assets.
Direct costs include: materials, supplies and other costs that directly go into production of the product

## Project Product Cost and Price Structure In US\$

| Item | Qty/ <br> day | Qty/ <br> yr | Prod. <br> Cost / <br> year | UPx | TR |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sweaters (small <br> size) | 36 | 11,232 | 3.70 | 41,558 | 6.0 | 67,392 |
| Sweaters (big <br> size) | 36 | 11,232 | 3.70 | 41,558 | 7.0 | 78,624 |
| Waist coats | 36 | 11,232 | 3.70 | 41,558 | 6.0 | 67,392 |
| Baby Shawls | 36 | 11,232 | 3.70 | 41,558 | 6.5 | 73,008 |
| Table cloth (sets) | 7 | 2,184 | 19.0 | 41,496 | 12.5 | 27,300 |
| Badges | 500 | 156,000 | 0.06 | 9,360 | 0.3 | 39,000 |
| Caps | 500 | 156,000 | 0.27 | 42,120 | 0.8 | 117,000 |
| Logos on T-shirts | 700 | 218,400 | 0.25 | 54,600 | 1.3 | 273,000 |
| Labeling | 700 | 218,400 | 0.03 | 6,552 | 1.0 | 218,400 |
|  |  |  |  | 320,362 |  | 961,116 |

## Profitability Analysis in US\$

| Profitability item | per day | per month | per year |
| :--- | :---: | :---: | :---: |
| Revenue |  |  |  |
| Sweaters (small size) | 216 | 5,616 | 67,392 |
| Sweaters (big size) | 252 | 6,552 | 78,624 |
| Waist coats | 216 | 5,616 | 67,392 |
| Baby Shawls | 234 | 6,084 | 73,008 |
| Table cloth (sets) | 88 | 2,275 | 27,300 |
| Badges | 125 | 3,250 | 39,000 |
| Caps | 375 | 9,750 | 117,000 |
| Logos on T-shirts | 875 | 22,750 | 273,000 |
| Labeling | 700 | 18,200 | 218,400 |
| Less Prod \& Operating <br> Costs | 520 | 13,524 | 162,286 |
| Profit | 2,560 | 66,569 | 798,830 |

## Market Demand

The business has a great market demand from Schools, Colleges, Corporate, NGOs; Households, Security organs and the various forces for designing and printing their uniforms.

## Equipment Suppliers

SENGA Sew Co Ltd, Plot 7 Luwum Street. P.O. Box 24901 Kampala Uganda

Tel: 256-414-235832, +256-772-863857
in budget making

## Trade Sector



## BUSINESS IDEA FOR PAINT MANUFACTURING

## Introduction

Paint manufacture involves the mixing of different chemicals at different sequences and at specified durations for them to set and form a thick and, or sticky solution that is used to coat structure surfaces when applied to give them a decorated look of the desired colours. The mixing is done by a trained person with acumen in that field. This industry product is on high demand since the Construction sector is growing very fast and booming. The capital outlay is a bit stretched but the return on investment justifies it.

The project requires an estimated fixed capital of US\$ 14,544 and operating costs of US\$ 491,765 generating revenue of US\$ 698,880 in the first year of operation.

## Production Capacity, Technology and Process

Paint manufacture machinery and equipment can be located in a moderate space of about 15 ft * 20 ft , and a store of about 15 ft * 10 ft plus an office space of about 120 square feet. The factory production capacity depends on the size of the machinery the shifts operated and the capital invested. If materials are available, the factory can operate up to three shifts. Costing is based on a capacity of 2,000 jerry cans of emulsion paint a month.

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | total |
| :--- | :---: | :---: | :---: | :---: |
| Mixer | No | 1 | 2,400 | 2,400 |
| Electrical Installation | No | - | - | 750 |
| Weighing Scale (Digital) | No | 1 | 300 | 300 |
| Laboratory Equipment | No | 1 | 400 | 400 |
| 600 Liter drums | No | 3 | 100 | 300 |
| Jerry cans | No | 1,600 | 2 | 3,200 |
| Pickup | No | 1 | 7,000 | 7,000 |
| Viscometer | No | 1 | 100 | 100 |
| Carrier Trolley | No | 1 | 50 | 50 |
| Time Watch | No | 1 | 4 | 4 |
| Tool Kit | No | 1 | 40 | 40 |
| Total |  |  |  | 14,544 |

Production and Operating Costs
(a)Direct Materials, Supplies and Costs
Cost Item

Direct Costs

| TT | Kgs | 3 | 96 | 288 | 7,488 | 89,856 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| PVA | Kgs | 2 | 80 | 160 | 4,160 | 49,920 |
| Whiting | Kgs | 0.15 | 1,600 | 240 | 6,240 | 74,880 |
| Foam line | Mlgm | 1.5 | 11.2 | 16.8 | 437 | 5,242 |
| Ammonia | Mlgm | 0.02 | 400 | 8 | 208 | 2,496 |
| Nitrosal | Kgs | 11 | 24 | 264 | 6,864 | 82,368 |
| Water | Ltrs | 0.03 | 1,920 | 57.6 | 1,498 | 17,971 |
| Packaging <br> Materials | Pcs | 2 | 160 | 320 | 8,320 | 99,840 |
| Sub-total |  |  |  |  | 35,214 | 422,573 |

## General costs (Overheads)

| Rent | 750 | 9,000 |
| :--- | :---: | :---: |
| Labour | 1,454 | 17,448 |
| Protective ware | 83 | 996 |
| Power | 1,950 | 23,400 |
| Selling and Distribution | 688 | 8,256 |
| Cleaning and Toiletries | 271 | 3,252 |
| Miscellaneous | 267 | 3,204 |
| Depreciation | 303 | 3,636 |
| Sub-total | 5,766 | 69,192 |
| Total Operating Costs | 40,980 | 491,765 |

1) Production costs assumed 312 days per year with daily capacity of producing 160-20ltr jerry cans of emulsion paint.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

## Market Analysis

Construction Sector is one of the fastest growing sectors in the country. There is therefore, a ready market for the paint and paint products once quality is taken into account during production. Construction Companies, Estate Developers, Hardware shops, Institutions as well as individuals are the potential customers.
Project product costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> Cost/yr | UPx | Total <br> Rve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Emulsion Paint | 160 | 49,920 | 9.8510577 | 491,765 | 14 | 698,880 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 2,240 | 58,240 | 698,880 |
| Less: Production and Operating <br> Costs | 1576 | 40,980 | 491,765 |
| Profit | 664 | 17,260 | 207,115 |

## Trade Sector

## MANUFACTURING HALF BRICKS

## Introduction

The construction sector is the most vibrant sector in Uganda today registering the highest level of growth and therefore any investment in such sector takes a lucrative path.

The Business Ideais targeted towards investing in a sector that is very vibrant with its products being on rising demand .An estimated output of 4056000 half bricks per year has been done and fixed capital of20475US\$ if injected in the project with operating costs of 51007US\$, can yield an estimated revenue of 54756US\$ in the first year of operation.

## Production Capacity, Technology \&Process

The production capacity depends on the machine used and the skilled manpower employed to operate it.

The production process of bricks is quite simple as it majorly involves mixing of the soil, moulding, drying the bricks but gently in a shade not by direct sunshine to reduce cracks that may develop on the brick. After drying them for about two weeks, they are well built to gather and then burnt. The burnt bricks are left for about four days and thereafter can be sold.

## Capital Investment Requirements in US\$

| Capital investment item | units | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Furniture \&Fittings | No | 2 | 500 | 1000 |
| Double Shaft mixer | No | 1 | 6,000 | 6,000 |
| Truck (3Tones) | No | 1 | 10,000 | 10,000 |
| Shade\&glazing room | No | - | 2,000 | 2,000 |
| Water tank | No | 3 | 300 | 900 |
| Spades,hoes,axes | No | - | - | 375 |
| Other tools | No | - | - | 200 |
| Total |  |  |  | 20,475 |

Production and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> yr | Pdn <br> cost/ <br> yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Plastic red Clay | Kgs | 0.04 | 900 | 36 | 936 | 11,232 |
| Water | Ltrs | 0.01 | 1,500 | 15 | 390 | 4,680 |
| Carbonized materials | Kgs | 0.04 | 400 | 16 | 416 | 4,992 |
| Rice husk Ash | Kgs | 0.01 | 300 | 3 | 78 | 936 |
| Sub-total |  |  | 900 | 70 | 1,820 | 21,840 |

## General Costs(Overheads)

| Firewood | 420 | 5,040 |
| :--- | :--- | :--- |
| Fuel | 347 | 4,158 |
| Labour | 708 | 8,500 |
| Feeding costs | 175 | 2,100 |
| Utilities | 21 | 250 |
| Ground and office rent | 288 | 3,450 |
| Miscellaneous | 46 | 550 |
| Depreciation | 427 | 5,119 |
| Sub-total | 2,432 | 29,167 |
| Total Operating Costs | 4,252 | 51,007 |

## Profitability

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 175.5 | 4,563 | 54,756 |
| Operating Costs | 163.5 | 4,251 | 51,007 |
| Profit | 12.016 | 312 | 3,749 |

## Market Analysis

The demand for bricks is very high more especially by housing estate developers, construction companies, individual construction projects etc.

## Government Facilities and Incentives

There are clear incentives set by the government on such projects but there exists tax exemptions on same raw materials like fuel, soil, and firewood.

## Trade Sector



## MAKING COTTON T-SHIRTS

## Introduction

This business idea is for production and marketing of cotton t-shirts. Cotton t -shirts are particularly for sports and casual wear. A good sweat absorbent wear, these garments are soft, tough and wrinkle free. The revenue is estimated at US $\$ 702,000$ per year, and the project cost is estimated at US\$ 107,819 inclusive of operating cost in the first year and the revenue potential is USD 702,000. The pay period is 3 months at net profit of $87 \%$.The production capacity per day is 450 t -shirts per day. The risk associated is marketing mix which can be managed by better management and control of the business.

## Production Process

As per the desired sizes and designs, the knitted fabric is cut into pieces and labeled as per measurement of the latest designs for the market. Then, the required button stitching is added to the semi finished fabrics. These products undergo strict quality control measures as knitted shirts and finished garments that are ready for packing and marketing.

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Over lock machine | no | 1 | 988 | 988 |
| Cutting machine | no | 1 | 2,680 | 2680 |
| Sewing machine | no | 5 | 500 | 2500 |
| Industrial flat iron | no | 1 | 258.4 | 258.4 |
| Packing materials | no | 100 | 0.05 | 5 |
| Cutting set | no | 6 | 11.7 | 70.2 |
| Measuring tape | no | 2 | 3 | 6 |
| Zig zag machine | no | 1 | 610 | 610 |
| Van | no | 1 | 11,200 | 11200 |
| Total cost on machinery |  |  |  | 18,318 |

## Production and Operating Costs

| Cost Item | Unit | @/ <br> day | Qty/ <br> day | Pdn <br> cost// <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cotton knitted <br> fabric | mtrs | 1.5 | 450 | 675 | 17,550 | 210,600 |
| Sub-total |  |  | 450 | 675 | 17,550 | 210,600 |

## General costs(overheads)

| Utilities(water and power) | 150 | 1,800 |
| :--- | :---: | :---: |
| Labour | 750 | 9,000 |
| Rent | 100 | 1,200 |
| Miscellaneous costs | 50 | 600 |
| Distribution costs | 260 | 3,120 |
| Depreciation(Asset write off)Expenses) | 4579 | 54,953 |
| Sub -total | 1,569 | 18,828 |
| Total Operating Costs | 7,458 | 89,501 |

1 Production costs assumed are for 312 days per year; with a daily capacity of 450 pieces of T-shirts.
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 items that directly go into production of the product.

## Project Product Costs and Price in US\$

| Item | Qty/day | Qty/yr | @ | Pdn cost /yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T-shirts | 450 | 140,400 | 0.6 | 89,501 | 5 | 702,000 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 250 | 58,500 | 702,000 |
| Less production and <br> operating Costs | 287 | 7,458 | 89,501 |
| Profit | 1,963 | 51,042 | 612,499 |

## Market Analysis

The demand for T -shirts has been increasing as a casual wear especially for sportswear. Apart from domestic demand, the shirts enjoy a lot of demand from the export market. With the current market prospects in the Western countries, this could yet turn out to be a very profitable project

## Source of raw materials and equipment

Raw materials can be sourced locally from knitting industries like phoenix or could be imported from Italy and German.

## Government Facilities and Incentives

The government is willing to support industrialist as an initiative for development. There are tax exemptions and land protectionism at relatively low interest rates.

## Trade Sector



## MANUFACTURING OF BALL-PEN REFILLS

## Introduction

The proposed plant is for manufacture of refills for the ball pens. The ball pen has almost replaced the conventional fountain pens, with the use-and-throw refills, creating a niche of its own. Thanks to the ease and convenience of the ball pens, they have turned into the most preferred medium of writing, which is not only cost -effective, but also serves the variegated needs of the people who write. These come in different sizes and in various colours made from a very small diameter HDPE tubes filled with a special type of ink. The business idea aims at production of 500 units per day thus 156,000 units per annum. The revenue potential is estimated at US $\$ 31,200$ annually and the startup capital is US $\$ 2,660$ thus total capital investment of the project is US $\$ 23,887$. The payback period is approximately 1 year with a net profit margin of $32 \%$.

## Production Process

The HDPE granules are fed into the extruder through hopper to produce extruded plastic tubes, which are cut to fit into various sizes of the ball pens by a cutter unit and the metal tips are fitted, ink filled to make the refills ready for use. They are then packed in a plastic film by a machine and dispatched to the market for bulk sell.

## Scale of Investment in US\$

## Capital Investment Requirements

| Capital Item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Ink filling system | No | 1 | 600 | 600 |
| Air compressor | No | 1 | 550 | 550 |
| Water pump | No | 1 | 350 | 350 |
| Cutter unit | No | 2 | 80 | 160 |
| Extrusion system | No | 1 | 1,000 | 1,000 |
| Total |  |  |  | 2,660 |

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

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost/day | Pdn Cost/ <br> month | Pdn Cost/ <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct costs3:

| HDPE <br> granules | Kgs | 0.5 | 10 | 5 | 130 | 1,560 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Tips | No | 0.005 | 550 | 2.75 | 71.5 | 858 |
| Packing <br> materials | No | 0.1 | 10 | 1 | 12 | 144 |
| Subtotal |  |  |  |  | 213.5 | 2,562 |

## General costs (Overheads)

| Labour | 500 | 6,000 |
| :--- | :--- | :--- |
| Utilities | 300 | 3,600 |
| Selling and Distribution | 200 | 2,400 |
| Administrative expenses | 200 | 2,400 |
| Shelter | 300 | 3,600 |


| Depreciation | 55 | 665 |
| :--- | :--- | :--- |
| Sub-total | 1,555 | 18,665 |
| Total Operating Costs | 1,769 | 21,227 |
| Prduction |  |  |

Production is assumed for 312 days per year
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
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/yr | Upx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Refills | 500 | 156,000 | 0.14 | 21,227 | 0.2 | 31,200 |
| TOTAL |  | 156,000 |  | 21,227 |  | 31,200 |

## Profitability Analysis Table in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 100 | 2,600 | 31,200 |
| Less: Production and Operating <br> Costs | 68 | 1,769 | 21,227 |
| Profit | 32 | 831 | 9,973 |

## Plant Capacity

The plant would have a minimum capacity of 500 refills per day.

## Market Analysis

Plastic ball pens are now gradually becoming a part of common possession, which turns popular by the year. Refills, an integral part of ball pens, also have good demand both in domestic as well as export market. Supply to educational institutions, public and private offices would help capture the market.

## Trade Sector

## MANUFACTURING MOSQUITO REPELLANT CREAM

## Introduction

This proposal is for producing cream that drives mosquitoes away from whoever applies the product. Mosquitoes are a menace to human race as they transmit malaria parasites through their bite. They must therefore be kept at bay. This can be successfully done by applying a repellent cream which keeps them at bay. The cream is applied on the exposed parts of the body e.g. the face and neck; the legs, the hands, and it remains effective for about 10 hours. The project requires an estimated fixed capital of US\$ 629 and total operating costs of US $\$ 84,566$ generating revenue of US $\$ 126,000$ in the first year of operation with a net profit margin of $33 \%$. The payback period is estimated at 4 years.

## Production Capacity, Technology and Process

Snow white petroleum jelly is heated and melted in stainless steel air-tight vessel and when it reaches a boiling point, mosquito repellent essential oil is added and allowed to mix thoroughly. Color may be added if desired. After, the solution is filled in plastic containers and placed on trays to cool. These are later cleaned, labeled and packed in dozens and sealed for dispatch to the market.

## Capital Investment Requirements in US\$

| Capital Investment Item | Qty | @ | total |
| :--- | :---: | :---: | :---: |
| Production Utensils | - | - | 125 |
| Tables | 3 | 130 | 390 |
| Basins | 5 | 1.2 | 6 |
| Jerrycans | 5 | 1.6 | 8 |
| Charcoal Stove | 2 | 50 | 100 |
| Total |  |  | 629 |

## Production and Operating Costs in US\$

## Direct materials, Supplies and Costs

| Cost Item | @ | Qty/ <br> day | Pdn Cost/ <br> day | Pdn Cost/ <br> mth | Pdn <br> Cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |
| Essential Oil | 45 | 1 | 45 | 1170 | 14040 |
| White Mineral Oil | 30 | 3 | 8.6 | 223.6 | 2683.2 |
| Petroleum Jerry | 400 | 4 | 61.5 | 1599 | 19188 |
| Labels | 0.01 | 256 | 2.56 | 66.56 | 798.72 |
| Plastic Containers | 0.5 | 256 | 128 | 3328 | 39936 |
| Sub-total |  | 268 | 360 | 6,387 | 76,646 |

## General Costs (Overheads)

| Labour | 175 | 2,100 |
| :--- | :---: | :---: |
| Rent | 125 | 1,500 |
| Selling and Distribution | 50 | 600 |
| Utilities | 160 | 1,920 |
| Miscellaneous | 150 | 1,800 |
| Sub-total | 660 | 7,920 |
| Total Operating Costs | 7,047 | 84,566 |

Production costs assumed 312 days per year with daily capacity of producing 3,500-150 mgs of repellant cream.
Depreciation (fixed asset write off) assumes 4 -years life of assets written off at $25 \%$ per year for all assets.
Direct costs include: materials, supplies and other costs that directly go into production of the product.
Total monthly days assumed are 26-days.
The valuation currency used is United States Dollars.

## Market Analysis

The market is wide since malaria is one of the biggest killer diseases in Uganda. The people who feel uncomfortable by sleeping under mosquito nets can easily switch to repellant creams.

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> Cost/yr | UPx | Total Rve |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Mosquito <br> Repellent Cream | 538 | 168,000 | 0.50 | 84,566 | 0.75 | 126,00000 |

## Profitability Analysis Table in US4

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 404 | 10,500 | 126,000 |
| Less: Production\& Operating Costs | 271 | 7,047 | 84,566 |
| Profit | 133 | 3,453 | 41,434 |

## Risk certainty

The risk involved in this idea is healthy and safety which can be mitigated by employing better qualified scientists.

## Trade Sector

$\square$

## 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 200 kg 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 $36 \hat{A}^{\circ}$ Be lye solution, mix well $21 / 2$ 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.

## Capital Investment Requirements

The total Capital Investment cost to start this project including year one's operating costs is estimated at USD 253,780.

## Market Analysis:

The demand for herbal soap is widely spread all over the Country although it may also be exported.

## Project Costs:

1. Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @\$ | Amount \$ |
| :--- | :---: | :---: | :---: | :---: |
| Electric Mixer | No. | 1 | 300 | 300 |
| 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 | 15 | 15 |
| Weighing Scale | No. | 1 | 50 | 50 |
| Delivery Van | No. | 1 | 6,000 | 6000 |
| Total Amount |  |  |  | 6,705 |

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

(a) Direct Materials, Supplies \& Costs

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/ <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| 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 | 21.25 | 553 |  |
| Aloe vera | Litres | 9 | 50 | 450 | 11,700 | 140,400 |
| Silicate | Litres | 20 | 5 | 100 | 2,600 |  |
| Sodium | Kgs | 0.43 | 5 | 2.15 | 56 | 670.8 |
| Sub total |  |  |  | 842.4 | 22,422 | 224,999 |

## General Costs (Over heads)

| Rent | 200 | 2,400 |
| :--- | :--- | :--- |
| Labour | 500 | 6,000 |
| Utilities (Power \&Water) | 300 | 3,600 |
| Repair \& Maintenance | 200 | 2,400 |
| Fuel | 500 | 6,000 |
| Depreciation(Asset write off) Expenses | 139.7 | 1,676 |
| Sub - total | 1,840 | 22,076 |
| Total Operating Costs | 24,262 | 247,075 |

## 3. Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | @\$ | Pdn Cost/yr\$ | UPx | T/rev |
| :---: | :---: | :---: | :---: | :--- | :---: | :---: |
| H. Soap | 200 | 62,400 | 3.96 | 247,075 | 6 | 374,400 |

## 4. Profitability Analysis

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,200 | 31,200 | 374,400 |
| Less: Production \& Operating Costs | 792 | 20,590 | 247,075 |
| Profit | 408 | 10,610 | 127,325 |

## Sources of Supply of Raw Materials:

Raw materials are readily available in Ugandan markets in the Chemicals Shops and Aloe vera farmers.

## Trade Sector

## MAKING ALUMINUM 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 $\$ 30,351$ 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 $7200-7600 \mathrm{C}$. 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.

Capital Investment Requirement in US \$

| Item | Units | Qty | Price | Total cost |
| :--- | :---: | :---: | :---: | :---: |
| oil fired furnace | No | 1 | 1,800 | 1,800 |
| Ball mill | No | 1 | 529 | 529 |
| Thermo compressor | No | 1 | 640 | 640 |
| Hot air chamber | No | 1 | 750 | 750 |
| Powder collecting duct <br> complete section | No | 1 | 1,300 | 1,300 |
| Water cooling pump | No | 1 | 800 | 800 |
| Total cost of tools \& Equipment |  |  |  | 5,819 |

Production and Operating costs in US \$
(a)Direct material, supplies and cost

| Cost Item | Units | Unit <br> Cost | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Aluminium metal | kgs | 0.13 | 32 | 4 | 108 | 1,300 |
| Mineral spirit | Itrs | 53 | 0.1 | 5.3 | 137.8 | 1,654 |
| Coating material | kgs | 8 | 1.6 | 12.8 | 332.8 | 3,994 |
| Packaging material | ltrs | 0.7 | 1.6 | 1.12 | 29.12 | 349 |
| Sub-total |  |  |  | 23 | 608 | 7,297 |

## General Costs (Overheads)

| 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 | 121 | 1,455 |
| Sub-total | 1,921 | 23,055 |
| Total Operating Costs | 2,529 | 30,351 |

[^0]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 \$

| Item | Qty/ <br> day | Qtyyr | Unit <br> cost | Pdn <br> cost/yr | Upx | Total <br> rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Aluminum <br> powder | 961.5 | 299,988 | 0.10 | 30,351 | 0.15 | 44,998 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 144.225 | 3,750 | 44,998 |
| Less: Production and operating <br> costs | 97.279929 | 2,529 | 30,351 |
| Profit | 47 | 1,221 | 14,647 |

## Market

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. There is also a market for export of aluminium powder and paste.

## Source of Equipment and materials

It can be locally made by Tonet Ltd, Kanyanya, Gayaza Rd or imported. Allumium can be locally purchased from individuals all over the country as scrap.

## 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.

## Trade Sector



## 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. These supplies are available in "Shauriyako" market - Kampala Uganda.

## 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 100USD.

## 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.

## Project Costs

Capital Investment Requirements in US\$
Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @\$ | Amount \$ |
| :--- | :---: | :---: | :---: | :---: |
| Scissors | No. | 2 | 10 | 20 |
| Mat | No. | 1 | 20 | 20 |
| Card Board | No. | 1 | 50 | 50 |
| Needles | No. | 2 | 5 | 10 |
| Total Amount |  |  |  | 100 |

Operating Costs in USS

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ $/$Prod. <br> day <br> Cost/ <br> month | Prod. <br> cost/Yr |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| 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 |
| Sub total |  |  |  | 207 | 5,382 | 64,584 |

## General Costs (Over heads)

| Rent | 200 | 2,400 |
| :--- | :--- | :--- |
| Labour | 300 | 3,600 |
| Utilities (Power \& Water) | 100 | 1,200 |
| Sub - total | 600 | 7,200 |
| Total Operating Costs | 5,982 | 71,784 |

Project Product Costs \& Price Structure in US\$

| Item | Qty/ <br> day | Qty/yr | @ $\$$ | Pdn <br> Cost/yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Silk Flowers | 20 | 6,240 | 12 | 71,784 | 15 | 93,600 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 300 | 7,800 | 93,600 |
| Less: Production \& Operating Costs | 230.07692 | 5,982 | 71,784 |
| Profit | 69.923077 | 1,818 | 21,816 |

## Sources of Supply of Raw Materials

The supply of inputs especially fabrics is readily available in Uganda, i.e. Phoenix International.

## Government Facilities and Incentives Available

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.

## Trade Sector



## MAKING PLASTIC BANGLES

## Introduction

This business idea is for the production and marketing of plastic bangles Women world over wear bangles for elegancy. Plastic bangles have a good market as they are available in different designs and colours for different occasions and seasons. Thus setting up a plant to make plastic bangles is a good business and is quite viable. The TR is estimated at US $\$ 1,248,000$ per year while the production capacity is estimated at 1,000 bangles per day. The total investment is estimated at US $\$ 852,277$ per year.

## Production process

In manufacturing plastic bangles, acrylic pipes of different diameters are cut as per the demanded market size and thickness, which are engraved and polished and ultimately packed for market.

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Socket buffing machine | No. | 1 | 1,400 | 1,400 |
| Fixer | No. | 2 | 500 | 1,000 |
| Testing machine | No. | 1 | 145 | 145 |
| Total cost on machinery |  |  |  | 2,545 |

## Production and Operating cost in US\$

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> cost// <br> day | Pdn cost <br> / month | Pdn <br> cost// <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Acyclic plastic <br> Pipe | mtrs | 46 | 50 | 2,300 | 59,800 | 717,600 |
| Colour | kgs | 5.8 | 60 | 348 | 9,048 | 108,576 |
| Sub-total |  |  | 110 | 2,648 | 68,848 | 826,176 |

## General costs(overheads)

| Utilities(water and power) | 150 | 1,800 |
| :--- | :---: | :---: |
| Labour | 750 | 9,000 |
| Rent | 250 | 3,000 |
| Miscellaneous costs | 500 | 6,000 |
| Distribution costs | 260 | 3,120 |
| Depreciation (Asset write off)Expenses) | 53.02 | 636.25 |
| Sub -total | 1,963 | 23,556 |
| Total Operating Costs | 70,811 | 849,732 |

Production costs assumed are for312 days per year with a daily capacity of 1000 bangles.
Depreciation (fixed assets write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets.
Direct costs include: materials, supplies and other costs that directly go into production of the product.

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

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> cost /yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| plastic bangles | 1,000 | 312,000 | 2.72 | 849,732 | 4 | $1,248,000$ |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 4,000 | 104,000 | $1,248,000$ |
| Less production and operating <br> Costs | 2,724 | 70,811 | 849,732 |
| Profit | 1,276 | 33,189 | 398,268 |

## Market Analysis

Plastic bangles have a ready market both in rural and urban areas. More so, they are liked by tourists and are normally bought for remembrance. They are therefore supplied in tourist centers, cultural centers and all shops.

## Sources of Raw Materials and Equipments

Raw materials are locally available from industries dealing in plastics where acyclic plastic pipes are made out of recycled plastics and equipments can be sourced from India and China.

## Government Facilities and Incentives

The government policy encourages establishment of many industries to create employment and plastic materials are an environment hazard and so recycling them is in line with government environment policy of controlling plastic bags.

## Trade Sector



## MAKING BUCKETS

## Introduction

Buckets are a household item in many homes mainly used to draw and store water and to wash clothes. They are however, used to carry other items as well. They are popular because of their durability and multipurpose use. They are quite common in rural areas, although urban dwellers use them too. The project idea has been developed to tap into the existing market for metallic buckets. The project estimates fixed capital of US $\$ 3,049$, operating costs of US $\$ 226,410$, generating revenue of 247,104 US $\$$ in the first year of operation. The project's profit margin is estimated at $8 \%$.

## Production Process

Buckets are manufactured out of galvanized iron sheets. It is cut into required sizes within conical shapes. These are then assembled and swaging as a main production process is done. A handle is made out of cut to size steel rod and fitted on to the body. Utmost precision is focused on the fixing of the bottom to the body to ensure it does not leak.
Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | total |
| :--- | :---: | :---: | :---: | :---: |
| Shearing machine | No | 1 | 820 | 820 |
| Bending Machine | No | 1 | 522 | 522 |
| Hand operated circle cutting <br> machine | No | 1 | 600 | 600 |
| Press Hand operated | No | 1 | 457 | 457 |
| Office furniture Fittings | No | - | - | 150 |
| Tool Kit \& other tools | No | - | - | 500 |
| Total |  |  |  | 3,049 |

## Production and Operating Costs

## Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost/ <br> month | Pdn <br> Cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Galvanized <br> Iron sheet | Pcs | 55 | 12 | 660 | 17,160 | 205,920 |
| Steel Rods | Pcs | 52 | 0.5 | 26 | 676 | 8,112 |
| Rivets | Pcs | 0.3 | 22 | 5.5 | 143 | 1,716 |
| Sub-total |  |  |  | 692 | 17979 | 215748 |

## General Costs (Overheads)

| Rent | 200 | 2,400 |
| :--- | :---: | :---: |
| Labour | 300 | 3,600 |
| Utilities | 175 | 2,100 |
| Cleaning and Toiletries | 50 | 600 |
| Miscellaneous | 100 | 1,200 |
| Depreciation | 64 | 762 |
| Sub-total | 889 | 10,662 |
| Total Operating Costs | 18,868 | 226,410 |

1) Production costs assumed 312 days per year with daily capacity of producing 36 buckets.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

## Market Analysis

Buckets and drums are common in schools and training institutions and places of communal gatherings like community centers.

## Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | @ | Pdn Cost/ <br> yr | UPx | Total <br> Revenu |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Buckets | 36 | 11,232 | 20 | 226,410 | 22 | 247,104 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 792 | 20,592 | 247,104 |
| Less: Production and Operating <br> Costs | 726 | 18,868 | 226,410 |
| Profit | 66 | 1,724 | 20,694 |

## Government Facilities and Incentives

The government has come out clean on the liberalization of the economy. There are a lot of incentives for those entrepreneurs who venture into manufacturing. They enjoy VAT deferment facilities and other tax benefits. Through organizations like Private Sector Foundation Uganda there are plenty of opportunities that accrue to the users of these available facilities including financial Subsidies.

## Business Risk

This is associated with some risks like incurring losses thus need for employing better marketing strategies like Price, product, and people among others.

## Trade Sector

## SCREEN PRINTING UNIT

## Introduction

This project is for making and marketing of screen printing units. Screen Printing Unit is a type of printing done by using designs developed on nylon silk cloth by chemical method, which is used for printing items like cards, stickers, file covers and also used for textile printing. Different types of press that may be private or public sector undertakings are buyers of screen printing units therefore there is a high demand in the market. The idea is premised on production of 385 screen printing units per day which translates into 120,120 screen printing units per annum. The revenue potential is estimated at US $\$ 231$ per day, translating into US\$72,072, per year with a profit margin of $28 \%$; and total investment is US $\$ 3,850$ for the first year of project operation. The payback period is estimated at 5 months.

## Production Process

Screen printing units involve developing the design on the nylon screen. After that, the screen is stretched on the wooden frame and the printing work taken up after cleaning the screen.

The screen is left to dry through application of a mixture of screen coating solution and a sensitizer along with a chlomolyne film backside. The coated room is left to dry in a darkroom. The dried screen is then exposed to the positive film of the design with the help of sunlight. Later with a jet of water, the screen is washed thoroughly till such a time when the design is clear on the screen. Subsequently, it is left to dry again. Finally printing is done with a squeeze using the desired printing ink.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amt |
| :--- | :---: | :---: | :---: | :---: |
| Exposed Cabinet fitted with <br> electrical fittings | No | 1 | 1,310 | 1,310 |
| Exposure frames fitted with glass | No | 2 | 520 | 1,040 |
| Flat Screen printing machine | No | 1 | 300 | 300 |
| Screen printing tools | - | - | 1,100 | 1,100 |
| Wooden frames | No | 4 | 25 | 100 |
| Total |  |  |  | 3,850 |

## Production and Operating Costs

## Direct Materials, Supplies and Costs in US\$

Production costs assumed are for 312 days per year with a daily capacity of 385 printed cards. Apart from printing cards like business cards, Christmas cards, the business Unit can also make other printed items like textiles, file covers etc therefore, the business project aims at production of more than one item. Depreciation (fixed asset write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets.

Direct Costs include materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 work days.

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/day | Pdn cost// <br> mth | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Printing <br> Chemicals | Liter | 2.5 | 5 | 12.5 | 325 | 3,900 |
| Nylon bolting <br> cloth | roll | 2.5 | 5 | 12.5 | 325 | 3,900 |
| Printing Inks | No | 35 | 2 | 70 | 140 | 1,680 |
| Sheets | No | 2.5 | 20 | 50 | 1,300 | 15,600 |
| Sub-total |  |  | 32 | 145 | 2,090 | 25,080 |

General Costs (Overheads)

| Rent | 150 | 1,800 |
| :--- | :---: | :---: |
| Labour | 1,225 | 14,700 |
| Utilities(Power) | 400 | 4,800 |
| Preliminary Costs | 250 | 3,000 |
| Miscellaneous Costs | 150 | 1,800 |
| Depreciation(Asset write off)Exp | 80 | 963 |
| Sub-total | 2,255 | 27,063 |
| Total Operating Costs | 4,345 | 52,143 |

Project Product Cost and Price Structure in US\$

| Item | Qty/ <br> day | Qty/ Yr | @ | Pdn <br> cost/Yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Screen Printing <br> Unit | 385 | 120,120 | 0.4 | 52,143 | 0.6 | 72,072 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Mth | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 231 | 6,006 | 72,072 |
| Less: Production \&Operating Costs | 167 | 4,345 | 52,143 |
| Profit | 64 | 1,661 | 19,929 |

## Market Analysis

Screen printing is popular and used by almost all people in the printing sector and product manufacturers. There is a high demand for printed materials, in both rural and urban areas

## Availability of Raw materials and Equipments

Raw materials like screen printing chemicals and screen printing inks can be imported from Dubai or procured locally while Equipments can be imported from China and Japan.

## Government Incentives Available

There are Government institutions such as: Private Sector Foundation Uganda which serves as a channel through which subsides and free advisory services are given to investors.

## Trade Sector



## MANUFACTURING ARTIST’S COLOURS

## Introduction

Artist's colors are widely used in many art paintings and designs. They are produced in many forms using different color material mixtures. The Business Idea is based on the need to explore the existing market especially with the vocationalisation of education. An estimated fixed capital of US $\$ 14,950$ and operating costs of US $\$ 50,223$, generating revenue of US $\$ 97,812$ in the first year of operations. The net profit margin is $47 \%$ with the payback period of 1 year and 5 months.

## Production Capacity, Technology and Process

The production process of artist's colors mostly involves mixing of artists' color raw materials. Molten wax and citric acid is mixed with colors and clay using a mixer. The mixture is poured and cooled in the moulds to cast the wax crayons. The final product is then poured into printed tin boxes or glass bottles or paper cartoons.

Investment Scale, Capital Requirements and Equipment
The investment scale largely depends on the set goals and objectives of the project. The equipment used is very simple to acquire and relatively cheap.

## Capital Investment Requirements in US\$

| Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Mixer | No | 2 | 500 | 1000 |
| Pot mill | No | 2 | 500 | 1,000 |
| Table press | No | 1 | 400 | 400 |
| Filling machine | No | 1 | 450 | 450 |
| Testing equipment | No | 1 | 600 | 600 |
| Delivery van | No | 1 | 6,000 | 6,000 |
| Furniture \& fittings | No |  | - | 3,000 |
| Other tools | No |  | - | - |
| Total |  |  |  | 2500 |

## Production and Operating Costs in US\$

(a)Direct materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost// <br> mth | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Clay | Kgs | 3 | 4 | 12 | 312 | 3,744 |
| Citric acid | Kgs | 11.5 | 2 | 23 | 598 | 7,176 |
| Paraffin wax | Kgs | 2 | 2 | 4 | 104 | 1,248 |
| Colour <br> pigments | Kgs | 4 | 4 | 16 | 416 | 4,992 |
| Water | Ltrs | 0.25 | 16 | 4 | 104 | 1,248 |
| Packaging <br> materials | Pcs | 0.12 | 190 | 22.8 | 592.8 | 7,114 |
| Other <br> materials |  | - | - | - | 100 | 1200 |
| Sub-total |  |  | 218 | 81.8 | 2,227 | 26,722 |

## General Costs(Overheads)

| Labour costs | 625 | 7,500 |
| :--- | :--- | :--- |
| Utilities | 208 | 2,496 |


| Administration expenses | 188 | 2,256 |
| :--- | :--- | :--- |
| Rent | 100 | 1,200 |
| Selling \& distribution | 150 | 1,800 |
| Fuel | 175 | 2,100 |
| Miscellaneous expenses | 113 | 1,356 |
| Cleaning and toiletries | 88 | 1,056 |
| Depreciation | 311 | 3,738 |
| Sub-total | 1,958 | 23,502 |
| Total Operating Costs | 4,185 | 50,223 |

1) Production costs assumed are for 312 days per year with daily capacity of producing 190 tins of artist's colours of 150 Liters each.
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) Total monthly days assumed are 26 work days
5) The valuation currency used is United States Dollars.

## Market Analysis

The market exists especially in schools, vocational institutions, art galleries, universities and in ordinary craft paintings.

## Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | @ | Pdn Cost/yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Artists <br> Colours | 190 | 59,280 | 0.85 | 50,223 | 1.65 | 97,812 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 313.5 | 8,151 | 97,812 |
| Less: Production \& Operating Costs | 161 | 4,185 | 50,223 |
| Profit | 153 | 3,966 | 47,589 |

## Government Facilities and Incentives

There is reduction of $100 \%$ on training expenditure cost incurred during the year of income on training citizen employees but not exceeding five years in total.

## Trade Sector



## HORN BUTTONS

## Introduction:

This involves production and marketing of horn buttons. A button is a small disc, typically round object usually attached to an article of clothing in order to secure an opening, or for ornamentation. Functional buttons work by slipping the button through a fabric or thread loop, or by sliding the button through a reinforced slit called a buttonhole. Horn buttons are made from cow and buffalo hooves and horns. Their market structure is relatively high since most clothes and some bags need horn buttons as fasteners.

## Production Capacity

The business idea is premised on three hundred and twelve working days and single shift of 8 hours per day. The unit is designed to have production of 100 kilograms of horn buttons per day translating into an annual production of 31,200 Kilograms. The revenue potential is estimated at US $\$ 2,600$ per month, translating into US $\$ 31,200$ per year with a net profit margin of $16 \%$ and total investment requirement is US $\$ 11,807$ for the first year of business Operation. The business idea's payback period is 3 years.

## Technology and Process Description

Horn button making involves use of plant and machinery like Circular Saw, Band Saw, Boring Machine, Hole Drilling machine, Circular Designing Machine, Buffing Polishing Lathes, Polishing Drums, Belt Sander, Double Ended tool grinder, Metal Turning

Lathe and Filter Tools. Production process involves cutting of horns, boring, hole drilling, designing, buffing, polishing and packing.

Capital Investment Requirements

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Circular Steel saw | No | 1 | 150 | 150 |
| Band saws | No | 2 | 125 | 250 |
| Boring machine | No | 4 | 100 | 400 |
| Buffing polishing lathe | No | 2 | 150 | 300 |
| Hole drilling machine | No | 3 | 250 | 750 |
| Circular designing machine | No | 4 | 250 | 1,000 |
| Polishing drums | No | 2 | 150 | 300 |
| Belt Sanders | No | 2 | 125 | 250 |
| Double ended tool grinder | No | 1 | 400 | 400 |
| Metal turning lathe | No | 1 | 357 | 357 |
| Filter tools | Set | 6 | 25 | 150 |
| Delivery Van | No | 1 | 7,500 | 7,500 |
| Total |  |  |  | 11,807 |

## Production and Operating Costs

Direct Materials, Supplies and Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn <br> cost/ <br> month | Pdn cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Animal <br> Horns | No | 0.5 | 50 | 25 | 650 | 7,800 |
| Colour/Dye | kg | 1.5 | 5 | 7.5 | 195 | 2,340 |
| Packing <br> materials | No | 0.05 | 100 | 5 | 130 | 1,560 |
| Sub-total |  |  | 155 | 37.5 | 975 | 11,700 |

## General Costs(Overheads)

| Rent | 100 | 1,200 |
| :--- | :--- | :--- |
| Labour | 500 | 6,000 |
| Utilities | 120 | 1,440 |
| Preliminary Costs | 150 | 1,800 |


| Miscellaneous Costs | 100 | 1,200 |
| :--- | :---: | :---: |
| Depreciation(Asset write off)Exp | 246 | 2,952 |
| Sub-total | 1,216 | 14,592 |
| Total Operating Costs | 2,191 | 26,292 |

Production costs assumed are for 312 days per year with a daily capacity of 100 Kilograms of Horn Buttons.
Depreciation (fixed asset write off) assumes _4_ years life of assets written off at _25\% per year for all assets.
Direct Costs include materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 work days.
Colours/Dyes can be purchased in different colours

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/ <br> Yr | @ | Pdn <br> cost/Vr | UPx | $\mathrm{T} / \mathrm{rev}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Horn Buttons | 100 | 31,200 | 0.8 | 26,292 | 1 | 31,200 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 100 | 2,600 | 31,200 |
| Less: Production and Operating Costs | 84 | 2,191 | 26,292 |
| Profit | 16 | 409 | 4,908 |

## Market Analysis

The market for horn buttons is readily available with designers, dress makers and tailors etc clothes manufacturing industries.

## Source of supply of Machinery, Equipment and Raw

## Materials

Machinery and Equipments are bought locally in hardware shops while raw materials are also got locally.

## Government Facilities and Incentives Available:

Government has encouraged Associations like Uganda
Manufacturers Association which is the mouth piece for all Industrialists. Other organizations like Uganda Investment Authority and Private Sector Foundation Uganda are in place to give support to those with investment ventures.

## Trade Sector

## MAKING LEATHER SANDALS

## Introduction

The business idea is for making and marketing of leather sandals. It is premised on production of 18,200 Leather Sandals per month which translates into 218,400 Sandals per year. The revenue potential is estimated at US $\$ 50,960$ per month which translates into US $\$ 611,520$ per year. This project cost is US $\$ 10,150$.

## Production Process

After the tannery process, different layers of skins and hides are put together to make shoe soles, another piece is cut that will make the strings of the shoe. The two pieces are then inter-joined by use of either glue or sewing machine. The two are finally taken for smoothening more especially at the edges.

## Capital Investment Requirements in US \$

| Item | Unit | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Heavy Duty sewing machine | No. | 1 | 5,000 | 5,000 |
| Smoother machine | No. | 1 | 1200 | 1200 |
| Cutting tools | No. | 5 | 190 | 950 |
| Delivery van | No. | 1 | 3,000 | 3,000 |
| TC of Machinery |  |  |  | 10,150 |

## Production and operating costs in US\$

## Direct Materials, Supplies and costs

| Cost Item | Units | Unit <br> Cost// <br> day | Qty/ <br> day | Prod. <br> cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| skins and hides | Kgs | 1 | 150 | 150 | 3,900 | 46,800 |
| Glue | grams | 1.5 | 10 | 15 | 390 | 4,680 |
| Sub-total |  |  |  | 165 | 4,290 | 51,480 |

## General costs (Overheads)

| Utilities (power) | 100 | 1200 |
| :--- | :---: | :---: |
| Utilities (water) | 100 | 1200 |
| Salaries | 250 | 3000 |
| Rent | 100 | 1200 |
| Depreciation (Assets write off) Expenses | 211.46 | 2,538 |
| Sub-total | 761.46 | 9,138 |
| Total Operating Cost | $5,051.5$ | 60,618 |

Production costs assumed 312 days per year with a daily capacity of 800 Leather Sandals.
Depreciation (fixed assets write off) assumes 4 years life of assets write off of $25 \%$ per year for all assets.
Direct costs include materials, supplies and other costs that directly go into production of the product.

## Project Product Cost and Price Structure In US \$

| Item | Qty/ <br> day | Qty/yr | @ | Prod. <br> Cost/yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Leather sandals | 700 | 218,400 | 0.28 | 60,618 | 2.8 | 611,520 |

## Profitability Analysis in US \$

| Profitability item | per day | per month | per year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,960 | 50,960 | 611,520 |
| Less: Prodn\& Operating <br> Costs | 194.28686 | 5,051 | 60,618 |
| Profit | 1,766 | 45,909 | 550,903 |

## Government Incentives Available

Government is encouraging small scale businesses and income generating activities to eradicate poverty through "Bonna Bagagawale Programme".

## Market Analysis

There is an ever-increasing demand for leather products processed from skins and hides.

## Availability of Raw Materials and Equipment

Raw Materials (skins and hides) can be got from Ankole and Karamoja regions in Uganda, and equipment can be obtained from the local market.

## Risk Certainty

This business associated with risks of stiff competion from other manufacturers thus need for employing better mixing strategies like Price, place among others.

## Trade Sector



## MAKING FANCY LEATHER GLOVES

## Introduction

Leather gloves are used as protective wear for human hands. They are available in types and sizes and are sought after by all but especially motor bicycle riders and military personnel. The demand for leather gloves exists both in domestic and export markets. The business idea aims at production of 520 pairs of gloves per month, which translates into 6,240 pairs annually. The revenue potential is estimated at $\$ 44,928$ annually year with a sales margin of $9.8 \%$. The total capital investment for the project is $\$ 2,780$.

## Plant Capacity

The profiled plant has a minimum capacity of 20 pairs of gloves per day.

## Production Process

The fancy gloves manufacturing process involves selecting suitable leather of required colours and thickness, cutting the leather to the desired sizes and designs, and putting linings. Gloves are stitched with thumbs attached to the palm, textile lining are also stitched and joined with glove. Finally, buttons, elastic, are fitted and the gloves are packed.

## Scale of Investment

## Capital Investment Requirements

| Capital Item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Flat bed sewing machine | No | 1 | 120 | 120 |
| Cylinder bed stitching machine | No | 1 | 400 | 400 |
| Leather skiving machine | No | 1 | 1300 | 1300 |
| Zig-zag sewing machine | No | 1 | 700 | 700 |
| Jack setting machine | No | 1 | 30 | 30 |
| Button-hole making machine | No | 1 | 200 | 200 |
| Flexible dummies | Sets | 3 | 10 | 30 |
| Total |  |  |  | 2,780 |

## Production and Operation costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> mth | Pdn Cost/ <br> yr1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct costs3:

| Leather | Metres | 3 | 20 | 60 | 1,560 | 18,720 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Buttons | Boxes | 1 | 1 | 1 | 26 | 312 |
| Lining | Meters | 2 | 1 | 2 | 52 | 624 |
| Decoration | Meters | 2 | 1 | 2 | 52 | 624 |
| Sub-total |  |  |  |  | 1,690 | 20,280 |

General costs (Overheads)

| Labour | 250 | 3,000 |
| :--- | :--- | :--- |
| Utilities | 200 | 2,400 |
| Selling and Distribution | 80 | 960 |
| Administrative expenses | 100 | 1,200 |
| Shelter | 200 | 2,400 |
| Depreciation machinery | 57.92 | 695 |
| Sub-total | 887.92 | 10,655 |
| Total Operating Costs | 2,578 | 30,935 |

Production is assumed for 312 days per year.
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
A production Month is assumed to have 26 days.

## Project Product costs and Price Structure

| Item | Qty /day | Qty/yr | @ | Pdn/yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gloves | 20 | 6,240 | 4.96 | 30,935 | 7.2 | 44,928 |
| Total | 20 | 6,240 | 4.96 | 30,935 | 7.2 | 44,928 |

Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 144 | 3,744 | 44,928 |
| Less: Production and Operating <br> Costs | 99.15 | 2,578 | 30,935 |
| Profit | 44.85 | 1,166 | 13,993 |

## Sources of Supply of Equipment

All equipments and raw materials are present in Uganda at Kiyembe Lane along Market Street.

## Government Facilities and Incentives

A favorable tax policy for investors/entrepreneurs, a liberalized economy and encouragement to export value added locally produced stuff.

## Trade Sector



## MAKING SHOE POLISH

## Introduction

It is usually a waxy paste or cream used to polish, shine, and water proof or improves and restore the appearance of leather and footwear products that it is used in both liquid and semi solid form. Shoe polish is not only used on footwear but can also be applied to all leather materials including bags, etc. The most prominent type of shoe polish, Kiwi, is imported and this gives local producers a chance to start producing shoe polish. Project capacity is 60,000 kgs annually with revenue estimated at US\$ 98,842 per year. The payback period for this idea is 7 months and the net profit margin of $18 \%$.

## Production Process

Shoe polish can be manufactured using vats reasonably powerful heaters and air conditioners. There is no set method of manufacture although most methods use pressure. The process consists of homogenizing molten waxes and other additives followed by thinning with solvent. This involves heating the wax in high temperatures of up to 85 degrees Celsius. The semi-solid polish is packed in round tins, while the liquid polish is packed in plastic bottles having sponge pasted caps. Dyes are added and mixed in turpentine oil if it is not a neutral polish. The mixed mass is reduced slowly to $50^{\circ} \mathrm{C}$, and as its viscosity increases, it is poured through a closed funnel into a cooling chamber.

The poured mass is allowed to settle slowly, providing uniform distribution. The process is considered straightforward and the required equipment is relatively easy to acquire. The cost of establishing a fully fledged shoe polish manufacturing facility has been estimated at around $\$ 6800$ (as of 2012). The project can yield an estimated revenue of 98,842 US\$ per year.
Capital Investment Requirement in US $\mathbf{\$}$

| ITEM | Units | Qty | Price | Total |
| :--- | :---: | :---: | :---: | ---: |
|  <br> heater | No | 1 | 3,700 | 3,700 |
| Storage vessel | No | 1 | 1,500 | 1,500 |
| Packing machine | No | 1 | 1,200 | 1,200 |
| Rota stamping Machine | No | 1 | 275 | 275 |
| Weighing balance | No | 1 | 125 | 125 |
| TC of tools |  |  |  | 6,800 |

1. Production costs assume 312 days per year with daily capacity of 192 Kgs .
. Depreciation (fixed asset write off) assumes 4 year life of assets written off at
25\% per year for all assets
2. Direct costs include: materials, supplies and all other costs incurred to produce the product.
3. A production month is 26 work days
4. Currency used is US Dollars.

## Production and Operation costs in US\$

(a) Direct Materials, Supplies and costs.

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost// <br> mth | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs <br> Carnauba <br> wax <br> Kgs $2.5_{9.62}$ |  |  |  |  |  |  |
| Synthetic <br> waxes | Kgs | 1.5 | 0.32 | 0.48 | 12.48 | 150 |
| Paraffin | Ltrs | 1.25 | 3.21 | 4.0125 | 104 | 1,252 |
| Turpentine | Ltrs | 3.5 | 0.3 | 1.05 | 27.3 | 328 |
| Dye | Kgs | 2 | 3.2 | 6.4 | 166.4 | 1,997 |
| Polish <br> containers | Pkts | 1 | 16 | 16 | 416 | 4,992 |
| Sub-total |  |  |  | 52 | 1,352 | 16,223 |

General Costs (Overheads)

| Labor | 4,000 | 48,000 |
| :--- | :--- | :--- |
| Selling \& distribution | 500 | 6,000 |
| Utilities (Water, power) | 400 | 4,800 |
| Rent | 300 | 3,600 |
| Miscellaneous expenses | 100 | 1,200 |
| Depreciation | 142 | 1,700 |
| Sub-total | 5,442 | 65,300 |
| Total Operating Costs | 6,793 | 81,523 |
|  |  |  |

## Project product costs and Price Structure in

| Item | Qty / <br> day | Qty / <br> yr | @ | Pdn cost/ <br> yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shoe Polish | 192 | 60000 | 1.36 | 81,523 | 1.65 | 98,842 |

Profitability analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 316.8 | 8,237 | 98,842 |
| Less: Production \& operating costs | 261 | 6,793 | 81,523 |
| Profit | 56 | 1,443 | 17,319 |

## Market

Leather footwear is a common product in rural and urban areas and shoe-polish is essential to improving the life and appearance of the footwear. If good quality shoe polish is locally produced, buyers cannot be an issue; what matters will be quality.

## Source of machinery

These equipments can be easily fabricated from Uganda as it helps reduce cost but importing may remain an option.

## Government incentives

$75 \%$ initial allowance granted in the first year of production on the cost base of plant and machinery for industries elsewhere in Uganda.

## Trade Sector



## MANUFACTURING PRINTING INK

## Introduction

Printing ink is one of the most needed products in the printing industry. Most of the printing ink is imported and this gives an opportunity for any new company to explore the un tapped section in the industry. This Idea therefore targets a wide market with an estimated fixed capital of US $\$ 15,020$ and operating costs of US $\$$ 377,663 generating revenue of US $\$ 561,600$ in the first year of operation with the net profit margin of $33 \%$.

The payback period for the project is 3 months.

## Production Capacity, Technology and Process

The most efficient method of manufacturing printing ink is the paste form. Here raw materials such as dry pigments are mixed with additives such as oxidants, modifiers, driers wetting agents in a stainless planetary mixer. The mixture is then passed into a triple roll for a number of times until the required quality standard is attained. The paste form ink is then packed.

Investment Scale, Capital Requirements and Equipment The investment scale largely depends on the set project objectives.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | total |
| :--- | :---: | :---: | :---: | :---: |
| Ball Mill | No | 1 | 1650 | 1650 |
| Varnish Kettle | No | 1 | 825 | 825 |
| Planetary Mixer | No | 1 | 1500 | 1500 |
| Triple Roll Mill | No | 1 | 2500 | 2500 |
| Vessels | No | 2 | 750 | 1500 |
| Hot Plates | No | 3 | 275 | 825 |
| Furniture | No | - | 1500 | 1500 |
| Storage Tanks | No | 3 | 500 | 1500 |
| Weighing Scale | No | 1 | 300 | 300 |
| Laboratory equipment | No | 1 | 2420 | 2420 |
| Other tools |  | - | - | 500 |
| Total |  |  |  | 15,020 |

## Production and Operating Costs in US\$

(a)Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn Cost/ <br> day | Pdn Cost/ <br> mth | Pdn <br> Cost/yr |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct Costs

| Dyes | Kgms | 10 | 55 | 550 | 14,300 | 171,600 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Solvents | Kgms | 5.6 | 20 | 112 | 2,912 | 34,944 |
| Resins | Kgm | 7 | 45 | 315 | 8,190 | 98,280 |
| Waxes | Kgms | 4 | 15 | 60 | 1,560 | 18,720 |
| Other <br> Materials | Kgms | - | - | - | 0 | 0 |
| Packaging <br> materials | Pcs | 0.5 | 135 | 67.5 | 1,755 | 21,060 |
| Sub-total |  |  | 270 | 1,105 | 28,717 | 344,604 |

## Cleaning and Toiletries

| Advertising | 200 | 2,400 |
| :--- | :---: | :---: |
| Labour | 1188 | 14,256 |
| Utilities | 483 | 5,796 |
| Cleaning and Toiletries | 396 | 4,752 |
| Miscellaneous | 175 | 2,100 |
| Depreciation | 312.92 | 3,755 |
| Sub-total | 2,755 | 33,059 |
| Total Operating Costs | 31,472 | 377,663 |

1) Production costs assumed 312 days per year with daily capacity of producing 120kgs of printing ink.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

## Market Analysis

The market for printing ink widely exists with major consumers such as: printeries, educational institutions, public and private offices etc.
Project Product Costs and Price Structure in US\$

| Item | Qty/ <br> Day | Qty/Yr | @ | Pdn <br> cost/yr | Unit <br> Price | Total <br> Rve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Printing Ink | 120 | 37,440 | 10.09 | 377,663 | 15 | 561,600 |

## Profitability Analysis Table in US\$

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 1800 | 46,800 | 561,600 |
| Less: Production and Operating Costs | 121083 | 31,472 | 377,663 |
| Profit | 589 | 15,328 | 183,937 |

## Government Facilities and Incentives

There is no VAT charged on raw materials and the government has secured the European Investment Fund which can be accessed by investors

## Trade Sector



## TOOTH BRUSH MAKING

## Introduction

This business idea is for making and marketing of tooth brushes. Toothbrushes are important for safeguarding teeth and cleaning the accessible surface, which helps prevent tooth decay and maintain dental hygiene and freshness. They have a wide market structure especially in urban areas throughout the year and can be made in different shapes and sizes.

The business idea is premised on production of 260,000 toothbrushes per month which translates into 3,120,000 tooth brushes per annum and this is on the basis of 312 working days in a year and 8 -hour single work shifts in working day. The revenue potential is estimated at US $\$ 528$, 321 per month translating into US $\$ 6,240,000$ per annum with a net profit margin of $92 \%$. Total investment requirement is US\$ 27,027 for the first year of project operation.

## Production Process

In manufacturing toothbrushes, cellulose acetate is used in a multifamily injection-moulding machine to make handles. Mixed
in a hopper of an automatic injection machine, cellulose acetate moulding powder is mixed together with a suitable dyestuff. The materials melt to take the shape of mould cavity after injecting this into multi-cavity moulds.
On opening the mould, the handles are ejected. Brush handles thus obtained are put into automatic toothbrush making machine for boring, bristle filling and then tightening of bristle is done by fine steel or brass. The bristle is trimmed and packed ready for sale.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | ---: |
| Automatic Injection molding <br> machine | No | 1 | 4,052 | 4,052 |
| Pre-heating Oven | No | 1 | 58 | 58 |
| Automatic Toothbrush making <br> machine | No | 1 | 9,096 | 9,096 |
| Scarp grinder | No | 1 | 3,168 | 3,168 |
| Multi Cavity mould | No | 1 | 516 | 516 |
| Hand tools | Set | 1 | 541 | 541 |
| Packing Machine | No | 1 | 632 | 632 |
| Weighing machine | No | 1 | 132 | 132 |
| Other Equipments | Set | 1 | 1,212 | 1,212 |
| Delivery Van | No | 1 | 7,620 | 7,620 |
| Total |  |  |  | 27,027 |

Direct Materials, Supplies and Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | cost/ <br> day | cost/ <br> month | cost/ <br> year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Cellulose acetate <br> moulding powder | Kg | 1 | 500 | 500 | 13,000 | 156,000 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Nylon Bristle | Kg | 0.75 | 200 | 150 | 3,900 | 46,800 |
| Dyes in different <br> colours | Kg | 0.75 | 100 | 75 | 1,950 | 23,400 |
| Gum | Liter | 1 | 100 | 100 | 2,600 | 31,200 |
| Packing materials | No | 0.05 | 10,000 | 500 | 13,000 | 156,000 |
| Sub-total |  |  | 10,900 | 1,325 | 34,450 | 413,400 |

## General Costs (Overheads)

| Rent | 270 | 3,240 |
| :--- | :--- | :--- |
| Labour | 2,150 | 25,800 |
| Utilities | 200 | 2,400 |
| Preliminary costs | 100 | 1,200 |
| Miscellaneous Costs | 100 | 1,200 |
| Deprecation (Asset write off)Exp | 6757 | 81,081 |
| Sub-total | 9,577 | 114,921 |
| Total Operating Costs | 44,027 | 528,321 |

Production costs assumed are for 312 days per year with a daily capacity of 10,000 toothbrushes.
This business unit can make tooth brushes of different colors and sizes.
Depreciation (fixed asset write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets.
Direct Costs include materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 work days.

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/Yr | @ | Pdn <br> cost/Yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tooth brushes | 10,000 | $3,120,000$ | 0.2 | 528,321 | 2 | $6,240,000$ |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 20,000 | 520,000 | $6,240,000$ |
| Less: Production \& Operating Costs | 1,693 | 44,027 | 528,321 |
| Profit | 18,307 | 475,973 | $5,711,679$ |

## Market Analysis

Due to the increasing awareness, personal dental care and dental hygiene is recommended by dental surgeons and is generally accepted by people in both urban and rural areas. Therefore, this product provides good scope for new entrants in the field and considering the growth in the total population coupled with the increasing awareness, the products are bound to find a good market.

## Supply of Raw Materials and Equipments

Raw materials can be procured locally from chemical shops while Equipments can be imported from Japan and China.

## Trade Sector



## MAKING RUBBER BANDS

## Introduction

This business idea is production and marketing of rubber bands. A rubber band is a short length of rubber and latex formed in the shape of a loop. They come in multiple colors. Such bands are typically used to hold multiple objects together. Rubber bands are elastic in nature and are extensively used for a variety of purposes in offices, shops and banks. Its establishment capital operational annual cost is modest at about US $\$ 45,501$ per year, Potential revenue is estimated at US $\$ 70,200$ per year and the production capacity is 80 bundles per day.

## Production Process

Latex is prepared by using stabilizers and pigments through the normal dipping method. With the help of moulds, through dipping and vulcanizing, rubber tubes are prepared. These are used to prepare rubber bands in different sizes, colours and widths.

Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Rubber band cutting machine | No. | 2 | 400 | 800 |
| Wooden moulds | No. | 3 | 100 | 300 |
| Ball mill | No. | 1 | 210 | 210 |
| Packing materials(kg) | No. | 10 | 30 | 300 |
| TC on machinery |  |  |  | 1,610 |

## Production and Operating Costs in US\$

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost// <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Rubber pigments | Sheets | 38 | 3 | 114 | 2,964 | 35,568 |
| Sub-total |  |  | 3 | 114 | 2,964 | 35,568 |

## General costs(overheads)

| Utilities(water and power) | 100 | 1,200 |
| :--- | :---: | :---: |
| Labour | 100 | 1,200 |
| Rent | 150 | 1,800 |
| Miscellaneous costs | 50 | 600 |
| Distribution costs | 260 | 3,120 |
| Depreciation(Asset write off)Expenses) | 33.5 | 402.5 |
| Sub -total | 693.5 | 8,323 |
| Total Operating Costs | 3,658 | 43,891 |

1 Production costs assumed 312 days per year with a daily capacity of 250 bundles of rubber bands.
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 US $\mathbf{\$}$

| Item | Qty/ <br> day | Qty/yr | @ | Pdn cost <br> $/ y r$ | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Rubber Bands | 250 | 78,000 | 0.56 | 43,891 | 0.9 | 70,200 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 225 | 5,850 | 70,200 |
| Less production and operating Costs | 140.67 | 3,658 | 43,891 |
| Profits | 84.33 | 2,192 | 26,310 |

## Market Analysis

Rubber bands have steady demand in the market. Financial institutions are the major users but trading community and others such as school, shop keeper etc use substantial amounts too

## Source of raw materials and equipments

Raw materials like rubber can be imported from Congo Free State, Ghana and Liberia while equipments can be sourced from China.

## Government facilities and Incentives

The government is encouraging the establishments of industries at all levels to create employment. These are soft loans with various financial institutions coupled with advisory service and subsidies.

## Trade Sector



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## Trade Sector



## MANUFACTURING PLASTIC CONTAINERS

## Introduction

This business idea is for manufacturing and marketing of plastic containers. Plastic containers are light-weight, flexible and chemically resistant containers. They can be made in attractive colors which are most popular and are used for household purposes. In most parts of Uganda especially the rural areas, people use plastic containers because they are very durable. A project to manufacture plastic containers would be very viable since there is good market for the containers in both rural and urban areas. Supply to super markets, retail and whole sellers would help to capture part of the market.

The business idea is premised on manufacturing 9,308 containers in different sizes per month, which translates into 111,696 containers per annum. But output can be increased as demand for the products gets established on the market. The revenue potential is estimated at US $\$ 14,893$ per month translating into US $\$ 178,714$ per annum with a sales margin of $20 \%$ and total investment requirement is US $\$ 15,785$ for the first year of project operation. The net profit margin of this idea is $11 \%$ with a payback period of at least 8 months.

## Production Process

The injection molding technique is simple. This is where the molten plastic is conveyed through a cool mould die of desired size and shape. The plastic takes the shape of the mould cavity and is finally removed and polished mechanically.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Index molding machine | No | 1 | 4400 | 4400 |
| Oven | No | 1 | 550 | 550 |
| Scrap grinder | No | 1 | 2200 | 2200 |
| Multi Cavity mould | No | 1 | 1375 | 1375 |
| Hand tools | Set | 1 | 550 | 550 |
| Weighing machine | No | 1 | 110 | 110 |
| Delivery Van | No | 1 | 6,600 | 6600 |
| Total |  |  |  | 15,785 |

## Production and Operating Costs

Direct Materials, Supplies and Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | cost/ <br> day | cost/ <br> month | cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Polypropylene <br> granules | Kg | 1.6 | 200 | 320 | 8,320 | 99,840 |
| Colors/ dyes | Kg | 0.8 | 100 | 80 | 2,080 | 24,960 |
| Packing Materials | Kg | 0.7 | 8 | 5.6 | 146 | 1,747 |
| Sub-total |  |  | 308 | 406 | 10,546 | 126,547 |

## General Costs(Overheads)

| Rent | 250 | 3,000 |
| :--- | :--- | :--- |
| Labour | 1,750 | 21,000 |
| Utilities (Water \& power) | 150 | 1,800 |
| Preliminary costs | 100 | 1,200 |
| Miscellaneous Costs | 100 | 1,200 |
| Depreciation (Asset write off) | 329 | 3,946 |
| Sub-total | 2,679 | 32,146 |
| Total Operating Costs | 13,224 | 158,693 |

Production costs assumed are for 312 days per year with a daily capacity of 385 plastic containers
Depreciation (fixed asset write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets.
Direct Costs include: materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 work days.

Project Product Cost and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn cost/ <br> yr | UPx | $\mathrm{T} / \mathrm{rev}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Plastic <br> Containers | 358 | 111,696 | 1.4 | 158,693 | 1.6 | 178,714 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per <br> Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 572.8 | 14,893 | 178,714 |
| Less: Production \&Operating Costs | 509 | 13,224 | 158,693 |
| Profit | 64 | 1,668 | 20,020 |

## Market Analysis

Plastic Containers are extensively used in day-to-day activities with a solid potential market in both rural and urban areas.

## Supply of Raw Materials and Equipments

Raw materials can be imported from India and South Africa while Equipments can be imported from China and Japan.

## Government Incentives Available

Government has put up Organizations like Private Sector Foundation Uganda which serve as a channel through which subsidies and free advisory services are given to serious investors.

## Risk certainty

The in the risks involved in this project are related to stiff competition from other firms which may bring about business failure before celebrating its first birth day, thus, there is need to employ better marketing mix tools like Price, product, quality control among others.

## Trade Sector



## BUSINESS IDEA FOR MAKING HERBAL DEODORANT

## Introduction

The business idea is to set up a plant to make liquid deodorant that can be used in kitchens and bathrooms, etc. This business idea is premised on production of 13,000 Deodorants per month which translates into 156,000 Deodorants per year. The revenue potential is estimated at US $\$ 26,000$ per month which translates into US $\$$ 312,000 per year. This project cost is US $\$ 3,073$.

## Production Process

$11 / 2$ tablespoon of beeswax (yellow is best)
1/2 tablespoon cocoa butter
1 tablespoon coconut oil
15 drops white thyme essential oil
15 drops rosemary essential oil
25 drops lavender essential oil

## 3 drops castor oil

Melt beeswax in a glass jar standing in hot water, add the cocoa butter, and when it has melted, add the oils. Stir to mix thoroughly, and then pour into a clean container. Discard deodorant stick case and leave to cool and set.

## Capital investment in US \$

| Item | Unit | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Emulsifier stirrer | No. | 1 | 500 | 500 |
| Storage vessel | No. | 1 | 50 | 50 |
| Hot plates | No. | 3 | 8 | 23 |
| Delivery van | No. | 1 | 2,500 | 2,500 |
| TC of Machinery |  |  |  | 3,073 |

Production and operating costs in US \$
Direct materials, supplies and costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | rod. <br> cost / <br> day | Prod. <br> cost/ <br> month | Prod. <br> Cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| bee wax | Kgs | 0.5 | 20 | 10 | 260 | 3,120 |
| Coacoa butter | Kgs | 5 | 10 | 50 | 1,300 | 15,600 |
| Cocoa Nut oil | Kgs | 0.2 | 5 | 1 | 26 | 312 |
| white thyme <br> essential oil | Ltrs | 0.2 | 5 | 1 | 26 | 312 |
| rosemary essential <br> oil | Ltrs | 0.2 | 5 | 1 | 26 | 312 |
| lavender essential <br> oil | Ltrs | 0.2 | 5 | 1 | 26 | 312 |
| castor oil | Ltrs | 0.2 | 5 | 1 | 26 | 312 |
| Sub-total |  |  |  |  | 1,690 | 20,280 |

## General costs (Overheads)

| Deodorant sticks | 13 | 156 |
| :--- | :--- | :--- |
| Utilities (power) | 150 | 1,800 |
| (Utilities (water) | 15 | 180 |
| Salaries | 300 | 3,600 |
| renting | 150 | 1,800 |
| Misc. costs | 100 | 1,200 |
| Depreciation (Assets write off) Expenses | 64 | 768 |
| Sub-total | 779 | 9,348 |
| Total Operating costs | 2,469 | 29,628 |

Production costs assumed are for 312 days per year with a daily capacity of 500 Herbal Deodorants.
Depreciation (fixed assets write off) assumes 4 years life of assets write off of 25\% per year for all assets.
Direct costs include: materials, supplies and other costs that directly go into production of the product.
Project product Cost and Price structure in US \$

| Item | Qty/ <br> day | Qty /yr | @ | Prod. <br> Cost / <br> yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Herbal deodorant | 500 | 156,000 | 0.19 | 29,628 | 2.0 | 312,000 |

## Profitability Analysis in US \$

| Profitability item | per day | per month | per year |
| :--- | ---: | :---: | :---: |
| Revenue |  |  |  |
| Herbal deodorant | 1,000 | 26,000 | 312,000 |
| Less Prod \& Operating Costs | 95 | 2,469 | 29,628 |
| Profit | 905 | 23,531 | 282,372 |

## Government Incentives

Government is encouraging small scale businesses and income generating activities to eradicate poverty through "Bonna Bagagawale Programme". Government lab, the Chemothary Centre and National Drug Authority Labs at Wandegeya help to analyse the chemical contents of the herbs.

## Supplier of Plant and Machinery

The equipments and raw materials required for this plant are locally available.

## Trade Sector



## BUSINESS IDEA FOR MAKING SCHOOL BAGS

## Introduction

The idea is premised on production and marketing of 20,800 bags per month which translates into 249,600 bags per year. The revenue potential is estimated at USD 41,600 per month which translates into USD 499,200 per year. The business has a good market demand throughout the year especially at the beginning of term. This kind of investment can cost about US 122,116 in the first trading year.

## Production Process

The manufacturing process calls for skill in cutting the raw material, followed by stitching and fixing accessories before it is packed for dispatch. An internal lining is fixed to prevent easy tearing from the inside.

## Capital Investment required in US\$

| Item | Unit | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Industrial Sewing machine | No. | 2 | 2,650 | 5,300 |
| Pair of scissors | No. | 5 | 6 | 30 |
| Measuring tape | No. | 1 | 3 | 3 |
| Delivery van | No. | 1 | 5,000 | 5,000 |
| TC of Machinery |  |  |  | 10,333 |

## Production and Operating Costs in US\$

## Direct Materials, Supplies and Costs

| Cost <br> Item | Units | @/ <br> day | Qty/ <br> day | Prod. <br> cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Tarpaulin | Mtrs | 1.3 | 100 | 125 | 3,250 | 39,000 |
| Zips | No. | 0.3 | 800 | 200 | 5,200 | 62,400 |
| Threads | Bundles | 1.5 | 3 | 5 | 130 | 1,560 |
| Sub-total |  |  |  |  | 9,737 | 116,844 |

## General costs (Overheads)

| Utilities (power) | 150 | 1,800 |
| :--- | :---: | :---: |
| (Utilities (water) | 20 | 240 |
| Packaging | 50 | 600 |
| Salaries | 150 | 1,800 |
| Renting | 150 | 1,800 |
| Depreciation (Assets write off) Expenses | 215.27 | 2,583 |
| Sub-total | 735.27 | 8,823 |
| Total Operating costs | 9,315 | 125,667 |
| Production costs assumed are for 312 days per year with a daily capacity of 800 |  |  |

Production costs assumed are for 312 days per year with a daily capacity of 800 School bags.
Depreciation (fixed assets write off) assumes 4 years life of assets write off at $25 \%$ per year for all assets.
Direct costs include: materials, supplies and other costs that directly go into production of the product.

## Product Costs and Price structure in US

| Item | Qty/ <br> day | Qty/yr | @ | Prod. <br> Cost /yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| School bags | 800 | 249,600 | 0.50 | 125,667 | 2 | 499,200 |

## Profitability Analysis in US $\$$

| Profitability item | per day | per month | per year |
| :--- | :--- | :--- | :--- |
| Revenue |  |  |  |
| School bags | 1,600 | 41,600 | 499,200 |
| Less Prod \& Operating Costs | 402.77965 | 10,472 | 125,667 |
| Profit | 1,197 | 31,128 | 373,533 |

## Market Analysis

With the growing numbers of school-and-college-going children, the demand for these bags is on the rise. Hence, there is a ready market for neatly stitched bags. The plant may also incorporate in other bags like transport bags. These are all easily marketable in Uganda.

## Government Incentives Available

Government has reduced taxes on scholastic materials to boost the Education sector. In a bid to eradicate poverty, government is encouraging small scale businesses through PROSPERITY FOR ALL programme.

## Suppliers of Plant and machinery

SENGA Sew Co Ltd, Plot 7 Luwum Street. P.O. Box 24901 Kampala Uganda.

Tel: 256-414-235832, +256-772-863857
Shoprite Lugogo Kampala

## Trade Sector

## MAKING LIQUID LAUNDRY SOAP

## Introduction

This profile envisages the establishment of a plant that will produce laundry liquid soap based on the capacity of 267 liters per day. The liquid laundry soap maybe used in hand or machine washing, that's why it's called laundry soap.

## Production Process

It is important to thoroughly boil the lye solution so that it will become clean and clear.

## Procedure

A. Making the Lye Solution - The proportion of one liter lye concentrate solution is: $45 \%$ or 450 ml caustic potash and $55 \%$ or 550 ml of water.

1. Weigh the 450 ml caustic potash accurately and dissolve this in 550 ml water. Mix well in a pail. This is the lye solution.
2. Place the pail with the lye solution on a big pail containing hot water so that the solution becomes slightly warm.

## B. Making the Soap

1. Mix one liter of coconut oil and 560 ml lye solution in the stainless steel container of the electric mixer.
2. When the mixture is slightly blended, transfer the stainless container to the stove. Continue mixing while the mixture is being boiled or until its temperature reaches $180 \hat{A}^{\circ}$ F. Switch off the stove to maintain the 180 $\hat{A}^{\circ} \mathrm{F}$ temperature.
3. Meanwhile, mix the Ethylene Diamine Tetra Acetic Acid (EDTA) with a little water in a separate container.
4. Slowly add 428 to 432 ml of boiling water to the mixture while stirring continuously.
5. Continue stirring the mixture for one hour until it becomes clear.
6. Allow 10-15 minutes to pass before adding the Coconut Diethanolamide (CDEA). The CDEA makes the soap produce more suds.
7. Add $2-5 \mathrm{ml}$ of lemon fragrance to the liquid soap.
8. When all of the ingredients have been thoroughly mixed, switch off the stove and the electric mixer. Remove the stainless steel container from the stove and allow the liquid laundry soap to cool.
9. When cooled, pour the soap into the plastic bottle. Before using the soap, set aside for some time to let the caustic soda lose its effect. The liquid laundry soap is now ready to use.

## Scale of Investment, Capital Investment

The total Capital investment cost to start this project is estimated at USD 4,100.

## Market Analysis

The market for Laundry Liquid soap is spread all over the country especially in Super markets, Schools, Hospitals, Hotels \& Hostels, Retail shops and can be exported.

## Project Costs

The total production cost at full operation capacity is estimated at US $\$ 197,521$ generating annual revenue of US $\$ 249,600$.

Capital Investment requirements in US\$

| Capital Investment item | Units | Qty | Unit cost | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Electronic Soap mixer | No. | 2 | 500 | 1000 |
| Weighing Scale | No. | 2 | 50 | 100 |
| Thermometer | No. | 2 | 50 | 100 |
| Boilers | No. | 3 | 300 | 900 |
| Other office equipments | No. | 1 | 2000 | 2000 |
| Total |  |  |  | 4100 |

## Production and operating costs in US\$

## Direct materials, supplies and costs

| Cost item | Units | @/ <br> day | Qty/ <br> day | Cost/ <br> day | Cost/mth | Cost/Yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  | US\$ | US\$ | US\$ |


| Coconut oil <br> waste oils | Ltrs | 12 | 19 | 228 | 5,928 | 71,136 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Caustic <br> Potash | Ltrs | 10 | 19 | 190 | 4,940 | 59,280 |
| Other <br> materials | Ltrs | - | - | 0 | 208 | 2,496 |
| Subtotal |  |  |  | 418 | 11,076 | 132,912 |

## General Costs(Overheads)

| Administration expenses | 541 | 6,492 |
| :--- | :--- | :--- |
| Labour | 2000 | 24,000 |
| Utilities | 500 | 6,000 |
| Rent | 1000 | 12,000 |
| Selling \& Distribution | 541 | 6,492 |
| Depreciation | 85 | 1,025 |
| Miscellaneous | 375 | 4,500 |
| Subtotals | 5,042 | 60,509 |
| Total operating Costs | 16,118 | 193,421 |
| Pro pract |  |  |

Project product cost and Price structure in US \$

| Item | Qty/ <br> day | Qty/ <br> yr | Prodn/ <br> yr | UPx | Revenue |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Liquid soap |  |  |  |  |  |  |
| (20liters jerry-can) | 160 | 49,920 | 3.9 | 193,421 | 5 | 249,600 |

## Profitability analysis in US \$

| Profitability item | Per day | Per month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 800 | 20,800 | 249,600 |
| Less: Production \& operating costs | 620 | 16,118 | 193,421 |
| Profit | 180 | 4,682 | 56,179 |

## Sources of Supply of Raw materials

Raw materials are readily available in Uganda from chemical shops.

## Government Facilities and Incentives Available

The Government supports industrialization in Uganda through; Tax exemptions, Land, Basic infrastructure, Grants, long term Loans and liberalized market. The manufacturers are allowed to recover their start-up cost to the tune of $25 \%$ of their expenditure in the year of income for four years and initial allowance of $50 \%$.

## Trade Sector

## MAKING AIR FRESHENER

## Introduction

Air fresheners are consumer products that mitigate unpleasant odors within indoor spaces. They can be in form of candles, sprays and gel and can also be used as a deodorant. They are an item that both household and public offices can't seem to do without. The freshener is also commonly used in both public and home toilets. The production capacity is estimated at 200 pieces per day, monthly production of 5,200 pieces and annual production of 62,400 which yields the TR US $\$ 162,240$ per year, leading to net profit margin of $27 \%$ and payback period of 8 months.

## Production Process

Air freshener cake is made out of Para dichlorobenzene, colour and perfume. These ingredients are properly mixed and molded by using fly press. The resulting gel of freshener is packed to avoid the absorption of moisture, which weakens the freshener.

Capital Investment Requirements (\$)

| Capital investment item | Unit | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Fly press wheel type single body | No. | 1 | 6,000 | 6,000 |
| Drum mixer | No. | 1 | 630 | 630 |
| Plastic bucket with lid weighing <br> balance | No. | 3 | 50 | 150 |
| Van | No. | 1 | 6,000 | 6,000 |
| Packing materials | No. | 1,500 | 0.4 | 600 |
| TC of machinery |  |  |  | 13,380 |

## Market Analysis

With increasing population and the need for improved living conditions, the demand for air freshener is also gradually increasing. The growing hygiene consciousness has attracted attention to this product. Hence, there is ready market in urban areas. Areas of target are: supermarket chains, retail shops, restaurants, hotels and tourist centers.

## Sources of Raw Materials and Equipments

Raw materials are readily available in Uganda markets in the chemicals industry and equipments are available in the market.

## Government Facilities and Incentives

The government is willing to support industrialists in Uganda through capital, tax exemptions, grants and liberalized markets and trade policies. There is a lot of free data and free consultation in government ministries and parastatals like Private Sector Foundation Uganda.

## Production and Operating costs (US\$)

| Cost Item | Units | $@ /$ <br> day | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost// <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Para <br> dichlorobenzene | Kg | 0.8 | 100 | 80 | 2,080 | 24,960 |
| Perfume colour | kg | 25 | 10 | 250 | 6,500 | 78,000 |
| Sub-total | 3 |  |  | 30 | 8,580 | 102,960 |

## General costs (overheads)

| Utilities(water and power) | 125 | 1500 |
| :--- | :---: | :---: |
| Labour | 75 | 900 |
| Rent | 125 | 1500 |
| Miscellaneous costs | 50 | 600 |
| Distribution costs | 260 | 3120 |
| Depreciation (Asset write off)Expenses) | 278.75 | 3,345 |
| Sub -total | 913.75 | 10965 |
| Total Operating Costs | 9,494 | 113,925 |

1 Production costs assumed are for 312 days per year with a daily capacity of 200 tins of air refreshner.
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 (\$)

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Pdn cost <br> $/ y r$ | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Air freshener | 200 | 62,400 | 1.83 | 113,925 | 2.6 | 162,240 |

Profitability Analysis (\$)

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 520 | 13,520 | 162,240 |
| Less production and operating <br> Costs | 365.14423 | 9,494 | 113,925 |
| Profit | 154.85577 | 4,026 | 48,315 |

## Trade Sector

## TEFLON (PTFE) PRODUCTS

- FRYING PANS


## Introduction

This profile envisages the setting up of a plant that manufactures Teflon products. For this case, this profile will look at Teflon frying pans. Teflon is a tough, waxy, nonflammable organic compound with a slippery surface, attacked by very few chemicals and stable over a wide temperature range. Its qualities make it useful in gaskets, bearings, container and pipe linings, electrical insulation, parts for valves and pumps used for corrosive fluids and protective nonstick coatings on cooking utensils, saw blades and other articles.

## Production capacity

This plant will be established on the premise of producing 200 sets ( 6 pieces each of Teflon frying pans per day giving rise to 6,000 sets of Teflon frying pans per month.

## Production Technology/Process

One of the most common and visible uses of PTFE is coating for nonstick pots and pans. The pan must be made of aluminum or an aluminum alloy. The pan surface has to be specially prepared to receive the PTFE. First, the pan is washed with detergent and rinsed with water, to remove all grease. Then the pan is dipped in a warm bath of hydrochloric acid in a process called etching. Etching roughens the surface of the metal. Then the pan is rinsed with water and dipped again in nitric acid. Finally, it is washed again with deionized water and thoroughly dried.

The liquid coating may be sprayed or rolled on. The coating is usually applied in several layers, and may begin with a primer. The exact makeup of the primer is a proprietary secret held by the manufacturers. After the primer is applied, the pan is dried for a few minutes, usually in a convection oven. Then the next two layers are applied, without a drying period in between. After all the coating is applied, the pan is dried in an oven and then sintered.

## Raw Materials:

Teflon frying pans are made from Teflon (PTFE) - "grains" or "Liquid" which is sprayed on the surface to form a more heat resistant layer.

## Equipment \& Materials

Heater/Convection Oven, Spray machine

## Scale of Investment, Capital Investment Requirements

 The total Capital investment cost to start this project is
## Market Analysis:

The demand for Teflon coated frying pans is spread all over the country especially in schools, hotels, \& individual households and may also be exported.

## Project Costs

## Fixed Capital Requirements in US\$

| Description | Amount (USD) |
| :--- | :---: |
| Equipment | 2200 |
| Total Amount | 2200 |

NB: The cost of land for factory building is estimated at US\$ 20,000

Working Capital: (Monthly) in US\$

| Description | Cost $\$$ | Amount (USD) |
| :--- | :---: | :---: |
| Raw materials (aluminum pans) | $20 /$ set | 120,000 |
| Teflon | $150 /$ ltr | 110,000 |
| Labour (4 people) | $370 @$ | 1,480 |
| Utilities (Power \&Water) |  | 1,250 |
| Total |  | 232,730 |

## Project Monthly Revenue:

The estimated daily sales and revenue are shown in the table below:

| Description | Sales | Price \$/set | Revenue\$ |
| :--- | :--- | :--- | :--- |
| Out put | 6,000 | 50 | 300,000 |
| W. Capital |  |  | 232,730 |
| Gross Profit |  |  | 67,270 |

## Sources of Supply of Raw Materials:

Teflon in form of Liquid or Grain is readily available in the Ugandan chemicals industry.

## Government Facilities and Incentives Available:

The Government has adopted initiatives to support industrialization through: tax exemptions, basic infrastructure, Grants, and liberalized market.

## Trade Sector



MAKING RUBBER WASHERS

## Introduction

The rubber washers are rings made of rubber used in mechanical devices and are used to plug any sort of leak in the pipeline system, seal parts in contact with liquids. They are used to prevent vibrations from spreading from one part to another so reducing noise. These are mainly common with chemical and food industries as major consumers of rubber washers and gaskets, etc.

With the continuing and increase in the rate of construction works, the demand for rubber washers, many of which are imported, will increase. The project annual operating cost is US $\$ 129,466$ producing 359,986 units annually translating into revenue estimated at US $\$ 179,993$ per year. The net profit margin is estimated $28 \%$ with a payback period of 4 months. Thus is viable and can be put up in areas where access to prime properties is guaranteed.

## Production Process

In manufacturing these products, rubber compounds are cut into moulds and pressed with the help of hand press, which are heated with steam, cut to required sizes and finally packed for the market. The profiled plant has a minimum plant capacity of 359,986 units of washers per year

Capital Investment Requirements in US\$

| Item | Units | Qty | Price | Total |
| :--- | :---: | :---: | :---: | :---: |
| Fly press Machine | No | 1 | 1530 | 1530 |
| Moulds | No | 4 | 1000 | 4000 |
| Furniture | No | 5 | 75 | 375 |
| Other hand tools | No | 1 | 500 | 500 |
| TC of tools |  |  |  | 6405 |

1. Production costs assume 312 days per year with daily capacity of 1,154 washers.
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 | @ | Qty/ <br> day | Pdn <br> cost// <br> day | Pdn <br> cost// <br> mth | Pdn <br> cost// <br> yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Rubber | Kgs/ <br> pkts | 0.1 | 9.62 | 0.962 | 25.012 | 300.14 |
| other chemicals | Itrs | 75 | 0.32 | 24 | 624 | 7,488 |
| Packaging <br> materials -paper <br> boxes | Kgs/ <br> pkts | 0.1 | 3.21 | 0.321 | 8.346 | 100.15 |
| Lubricant | kgs/ <br> ltres | 12.5 | 0.3 | 4 | 104 | 1,248 |
| Polyethene bags | Kgs/ <br> pkts | 0.5 | 1 | 0.5 | 13 | 156 |
| Sub-total |  |  | 360 | 9,367 | 112,406 |  |

## General Costs (Overheads)

| Labour | 455 | 5,460 |
| :--- | :---: | :---: |
| Selling \& distribution | 250 | 3,000 |
| Utilities (Water, power) | 250 | 3,000 |
| Rent | 200 | 2,400 |


| Miscellaneous expenses | 100 | 1,200 |
| :--- | :---: | :---: |
| Depreciation | 167 | 2,000 |
| Sub-total | 1,422 | 17,060 |
| Total Operating Costs | 10,789 | 129,466 |

## Project product costs and Price Structure in

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> cost/ <br> yr | UPx | TR(\$) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rubber Washers | 1,154 | 359,986 | 0.4 | 129,466 | 0.5 | 179,993 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per <br> month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 577 | 14,999 | 179,993 |
| Less: Production and operating costs | 415 | 10,789 | 129,466 |
| Profit | 162 | 4,211 | 50,527 |

## Market

Industrial houses are the major consumers of rubber washers. Therefore, the entrepreneur has to establish a network before entering the market. However, due to the booming premises' construction in the country the market is promising.

## Source of Equipment and Material

Equipment can be fabricated in Uganda at: Tonet Ltd, Kanyanya, Gayaza Rd, John Lugendo and Co Ltd Ndeeba Masaka Rd, email lugendojohn07@yahoo.com and Tree Shade Ltd, Mwanga II RdKisenyi Kampala can provide this. Materials are both imported and locally purchased.

## Government Intervention

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

## Risk certainty

The risk with this idea is in case of poor quality rubber rings, the business may lose its market. Therefore, the need for better management control.

## Trade Sector



## MAKING RUBBER STAMPS

## Introduction

Rubber stamps are used with some type of ink made of dye or pigment applied on them to leave a mark or an image or pattern that has been carved, molded, laser engraved when stamped on a piece of paper or anything. The stamps are made in different sizes and design as per the requirements of the customer. Manufacturing of rubber stamps is not only simple but also lucrative. Company seals can also be made in this project. It costs US\$ 2,721 to be set up for the first year of operation with capacity production of 14,998 stamps per year and yielding TR of US\$ 53,999 per annum. The net profit margin is at $5 \%$ with a payback period of 5 months.

## Production Process, Capacity and Technology

The letter types are arranged in a composing tray with the text placed along with spaces and lines fixed on to the frame of a wooden block. A mixture of plaster of Paris and whitening powder are placed on a metallic tray. The tray is kept on letter type frame and fixed tightly, which results in an impression on the plaster of Paris mixture. A thin rubber sheet is cut into the required size. The rubber sheet is spread over the impression of plaster of Paris and pressed to the frame with the help of a hand press.

The frame (entire set) is heated for a specific time so that the rubber penetrates in the letter impression. Finally, the rubber impression is cleaned and pasted to a wooden or metal handle with the help of synthetic adhesive. A rubber cushion piece is also used to hold the rubber firmly to the handle. The profiled plant has a minimum capacity of 15,000 units of rubber stamps per annum and this is on the basis of 312 working days in a year.

## Capital Investment Requirement in US \$

| Item | Unit | Qty | Price | Total |
| :--- | :---: | :---: | :---: | :---: |
| Lead letter types | No | 1 | 500 | 500 |
| iron composing stand | No | 1 | 122 | 122 |
| case stand or wooden frames | No | 4 | 10 | 40 |
| stamp pressing machine | No | 1 | 500 | 500 |
| Hand cutter | No | 1 | 4 | 4 |
| Stove | No | 1 | 55 | 55 |
| Other tools | No | 1 | 1500 | 1500 |
| 1. Production costs assume 312 days per year with daily capacity of 48.1stamps. |  |  |  |  |

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\$

## Direct materials, supplies and costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| iron and wooden <br> sheets | Itrs/ <br> kgs | 1 | 0.16 | 0.16 | 4.16 | 49.92 |
| Synthetic adhesive | Itrs | 0.1 | 0.1 | 0.1 | 2.6 | 31.2 |
| plaster of Paris | roll | 0.04 | 0.96 | 0.038 | 0.9984 | 12 |
|  <br> whitening powder | Itrs/ <br> kgs | 4.65 | 0.22 | 1.023 | 26.598 | 319.18 |
| Packaging material | pkts | 0.5 | 3.21 | 1.605 | 42 | 501 |
| Sub-total |  |  |  |  | 76.36 | 914 |

## General Costs (Overheads)

| Labour | 200 | 2,400 |
| :--- | :---: | :---: |
| Selling \& distribution | 70 | 840 |
| Utilities (Water, power) | 100 | 1,200 |
| Administration | 110 | 1,320 |
| Rent | 100 | 1,200 |
| Miscellaneous expenses | 50 | 600 |
| Depreciation | 81 | 975 |
| Sub-total | 711 | 8,535 |
| Total Operating Costs | 787.36 | 42,825 |

## Project product costs and Price structure

| Item | Qty/ <br> day | Qty/ <br> yr | Unit <br> Cost | Pdn <br> cost/yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rubber stamps | 48.1 | 14,998 | 2.86 | 42,825 | 3.6 | 53,999 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 173 | 4,499 | 53,999 |
| Less: Production and operating <br> costs | 137 | 3,569 | 42,825 |
| Profit | 36 | 931 | 11,174 |

## Market

The demand of this product is increasing day by day and this has resulted in a small number of entrepreneurs generally becoming involved in manufacturing these products locally. The customer base for rubber stamps, among others, includes government offices, colleges, schools, banks, private companies and small shops in semi- urban and urban areas.

## Source of Equipment and Raw materials

Some Equipment may be imported and others got locally. Raw materials like rubber tires can sometimes be used and they are locally available although importing could also be done.

## Trade Sector

## 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

Put plain white flour and water into a bowl depending on how much glue you need.

Mix the flour and water together until a smooth paste is achieved. It should not be too thick or too drippy
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 12,945 generating annual revenue of USD 234,000 at a net profit of $28 \%$ with a payback period of 5 months.

## Market Analysis

The demand for office glue is very high in the paper products industry, schools, offices, and craft projects.

## Capital Investment Requirements in US\$

| Capital Investment Item | units | Qty | @ \$ | amount \$ |
| :--- | :---: | :---: | :---: | :---: |
| Delivery van | No. | 1 | 11200 | 11200 |
| Mixer | No. | 1 | 580 | 580 |
| Gas cooker | No. | 1 | 840 | 840 |
| Boiler | No. | 1 | 110 | 110 |
| Bowls | No. | 2 | 107.6 | 215.2 |
| Total Amount |  |  |  | 12945.2 |

## Operating Costs in US\$

| Item | Units | @ | Qty/ <br> day | Prod <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/ <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Manioc <br> Powder | Kgs | 0.5 | 250 | 125 | 3250 | 39000 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Vinegar | Litres | 2.5 | 100 | 250 | 6500 | 78000 |
| Water | Litres | 0.05 | 200 | 10 | 260 | 3120 |
| Sub total |  |  |  | 385 | 10,010 | 120,120 |

## General Costs (Over heads)

| Rent | 400 | 4,800 |
| :--- | :---: | :---: |
| Packaging Material | 500 | 6,000 |
| Labour | 800 | 9600 |
| Utilities (Power \& Gas) | 1,000 | 12,000 |
| Repair \& Servicing | 500 | 6,000 |
| Fuel | 500 | 6,000 |
| Depreciation (Asset write off) Expenses | 269.69 | 3,236 |
| Sub - total | 3,970 | 47,636 |
| Total Operating Costs | 13,980 | 167,756 |

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

| Item | Qty/day | Qty/yr | @\$ | Pdn Cost/ <br> yr\$ | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Glue | 500 | 156,000 | 1.1 | 167,756 | 1.5 | 234,000 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 750 | 19,500 | 234,000 |
| Less: Production \& Operating Costs | 538 | 13,980 | 167,756 |
| Profit | 212 | 5,520 | 66,244 |

## Sources of Supply of 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.

## Risk certainty

The business risk involved may include operational risks; marketing risks among others thus need to manage properly the marketing mix tools of Price, product among others.

## Trade Sector



## 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 spaghettilike 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 total scale of investment is estimated at US $\$ 12,300$ where at least $1,872,000$ dozens of pencils will be manufactured in a year and this will generate annual revenue of US $\$ 505,400$ in the first of project operation with a net profit margin of $30 \%$.

## 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.

## Project Costs

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

## Capital Investment Requirements in US\$

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Delivery Van | No. | 1 | 6,000 | 6,000 |
| Power Saw | No. | 1 | 500 | 500 |
| Grover | No. | 1 | 250 | 250 |
| Eraser Tipping Machine | No. | 1 | 800 | 800 |
| Ferrule | No. | 1 | 1,200 | 1,200 |
| Painting Machine | No. | 1 | 1,000 | 1,000 |
| Shaping Machine | No. | 3 | 800 | 2,400 |
| Furniture | No. | 5 | 30 | 150 |
| Total Amount |  |  |  | 12,300 |

1. Operating Costs in US\$

| Item | Units | @ | Qty/ <br> day | PdnCost/ <br> day | Pdn cost/ <br> mth | Prod. Cost/ <br> Year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Cedar | Ft | 2 | 500 | 1000 | 26000 | 312000 |
| Graphite | Kgs | 1 | 60 | 60 | 1560 | 18720 |
| Sub total |  |  |  | 1,060 | 27,560 | 330,720 |

## General Costs (Over heads)

| Rent | 400 | 4,800 |
| :--- | :---: | :---: |
| Packaging Material | 200 | 2,400 |
| Labour | 300 | 3,600 |
| Utilities (Power \& Water) | 400 | 4,800 |
| Repair \& Servicing | 200 | 2,400 |
| Fuel | 300 | 3,600 |
| Depreciation (Asset write off) Expenses | 256.25 | 3,075 |
| Sub - total | 2,056 | 24,675 |
| Total Operating Costs | 29,616 | 355,395 |

## Project Product Costs \& Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> Cost/yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pencils (Dzns) | 6000 | $1,872,000$ | 0.19 | 355,395 | 0.3 | 505,440 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per <br> Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,620 | 42,120 | 505,440 |
| Less: Production \& Operating Costs | 1,139 | 29,616 | 355,395 |
| Profit | 481 | 12,504 | 150,045 |

## Source of Supply of Raw Materials

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

## Government Facilities and Incentives Available

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

## Trade Sector



## 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 $\$ 2,720$ with capacity of 59,998 boxes annually, estimated revenues US\$ 59,998per year with a net profit margin of $45 \%$.

## 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.

## Capital Investment Requirement in US \$

| Item | Units | Qty | Price | Total |
| :--- | :---: | :---: | :---: | :---: |
| Mixer | No | 1 | 1,200 | 1,200 |
| Packing \&Sealing machine | No | 2 | 4 | 8 |
| Mould | No | 2 | 82 | 164 |
| Boilers/ Melting machine | No | 2 | 512 | 1,024 |
| Compressor /cooler | No | 1 | 324 | 324 |
| TC of tools \& Equipment |  |  |  | 2,720 |

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\$

## Direct materials, supplies and costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn cost/ <br> yr |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |  |
| Paraffin, | Itrs | 1.3 | 0.5 | 0.624 | 16 | 195 |  |
| Wax | kgs | 3 | 16 | 48.09 | 1250 | 15004 |  |
| Dyes | pkts/kgs | 3.3 | 0.1 | 0.325 | 8.45 | 101.4 |  |
| Packaging <br> material | pkts/kgs | 1.5 | 9.62 | 14.43 | 375.18 | 4502.16 |  |
| Sub-total |  |  |  | 63.469 | 1,650 | 19,802 |  |

## General Costs (Overheads)

| 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 | 57 | 680 |


| Sub-total | 1,097 | 13,160 |
| :--- | :--- | :--- |
| Total Operating Costs | 2,747 | 32,962 |

## Project product cost and Price Structure

| Item | Qty/day | Qty/yr | Unit <br> cost | Pdn <br> cost/yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Crayons | 192 | 59,998 | 0.5 | 32,962 | 1 | 59,998 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 192.3 | 5,000 | 59,998 |
| Less: Production and <br> operating costs | 106 | 2,747 | 32,962 |
| Profit | 87 | 2,253 | 27,035 |

## Market

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, educationa institutions including nurseries, vocational colleges like Art academies, should be targeted. Supply should also be made to bookshops and other stationery shops.

## Source of machinery and raw materials:

It can be locally made by Tonet Ltd, Kanyanya Gayaza Rd or John Lugendo and Co Ltd, Ndeeba Masaka Rd email lugendojohn07@ yahoo.com. Wax can be locally sourced cheaply, but can also be imported.

## 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.

## Trade Sector



## 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 total project cost is US $\$ 5,710$, with production capacity of $50,000 \mathrm{kgs}$ per year with estimated revenue of US $\mathbf{2 5 0 , 0 6 8}$ annually with a net profit margin of $7 \%$.

## 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.

Capital Investment Requirement in US\$

| Item | Units | Qty | Price | Total |
| :--- | :--- | :--- | :--- | :--- |
| Cast iron pan | No | 1 | 550 | 550 |
| Soft soap dissolving vessel | No | 1 | 720 | 720 |
| Colloid mill | No | 1 | 790 | 790 |
| Hot water still direct fired | No | 1 | 210 | 210 |
| Casein solution tank | No | 1 | 1,200 | 1200 |
| HBTA creosote mixing tank | No | 1 | 540 | 540 |
| Other tools \& equipment | No | 1 | 1,700 | 1700 |
| TC of Machinery \& Tools |  |  |  | 5,710 |

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

## Market

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.

## Production and Operating costs in US\$

## Direct materials, supplies and costs.

Direct materials, supplies and costs.

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| High boiling tar <br> acid | ltrs/ <br> kgs | 23 | 25.64 | 589.72 | 15332.72 | 183,993 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cresol, creosote | Itrs | 7.2 | 3.21 | 23.112 | 600.912 | 7,211 |
| Casein \& Borax | Itrs | 8 | 1.6 | 12.8 | 332.8 | 3,994 |
| Sodium benzene | Itrs | 13.2 | 1.6 | 21.12 | 549 | 6,589 |
| W.W. Rosin | Itrs | 7.9 | 0.15 | 2 | 31 | 370 |

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| Castor oil \& soya <br> bean oil | Itrs/ <br> kgs | 10.2 | 0.25 | 2.55 | 66.3 | 796 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Caustic soda | Itrs | 12.5 | 0.32 | 4 | 104 | 1,248 |
| Packing material | kgs/ <br> pkts | 0.17 | 64.1 | 11 | 283 | 3,400 |
| Sub-total |  |  |  | 665 | 17,210 | 207,600 |

## General Costs (Overheads)

| 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 | 118.9 | 1,428 |
| Sub-total | 2,169 | 26,028 |
| Total Operating Costs | $19,468.9$ | 233,627 |

Project product costs and Price structure in $\$$

| Item | Qty/day | Qty/yr | Unit <br> cost | Pdn <br> cost/yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Disinfectant <br> Fluids | 160.3 | 50,014 | 4.7 | 233,627 | 5 | 250,068 |

## Profitability Analysis in US

|  | Per day | Per <br> month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 802 | 20,839 | 250,068 |
| Less: Production and operating costs | 749 | 19,469 | 233,627 |
| Profit | 53 | 1,370 | 16,441 |

## Trade Sector



## MAKING RUBBER MOULDED PRODUCTS

## Introduction

This business idea is for making rubber molded products. Rubber molded products are mostly used in automobile and assembling units. Molded rubber products find extensive use in railways, automobile, and bicycles and also in many industrial and domestic appliances. The business idea aims at production of $1,300 \mathrm{kgs}$ of rubber products per month. The revenue potential is estimated at US $\$ 78,000$ per year with a net profit margin of $42 \%$ and a payback period of 2 years. The total capital investment for the project is US $\$$ 15,390.

## Production Capacity

The profiled plant has a minimum capacity of $36,000 \mathrm{kgs}$ of rubber products per annum when operating a single shift of eight hours a day, 300 days per annum.

## Technology and Process Description

Natural rubber latex is compounded with zinc oxide, anti-oxidants, paraffin wax, satiric acid, china clay, needle oil, ammonium chloride, in a rubber mixing mill. This mixture is extruded as slabs or other forms of rubber sheeting and then fed into moulds in measured quantities to the compression moulding press. These are cured by steam from a boiler.

## Scale of Investment

Capital Investment Requirements

| Capital Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Rubber Mixing Mill | No | 1 | 220 | 220 |
| Extruder | No | 1 | 12,500 | 12500 |
| Hot Press | No | 1 | 300 | 300 |
| Boiler | No | 1 | 2,000 | 2000 |
| Moulds | No | 10 | 22 | 220 |
| Weighing Scale | No | 1 | 150 | 150 |
| Total |  |  |  | 15,390 |

Production and Operation costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> Cost/ <br> Year |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct costs3:

| Rubber | Kgs | 0.4 | 50 | 20 | 520 | 6,240 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Zinc Oxide | Litres | 0.48 | 20 | 9.6 | 249.6 | 2,995 |
| Antioxidants | Litres | 0.8 | 10 | 8 | 208 | 2,496 |
| Paraffin Wax | Kgs | 0.12 | 30 | 3.6 | 93.6 | 1,123 |
| Needle Oil | Litres | 0.35 | 5 | 1.75 | 45.5 | 546 |
| Satiric Acid | Litres | 2.52 | 5 | 12.6 | 327.6 | 3,931 |
| Ammonium Chloride | Kgs | 0.22 | 7 | 1.54 | 40.04 | 480 |
| China Clay | Kgs | 0.28 | 8 | 2.24 | 58.24 | 699 |
| Subtotal |  |  |  |  | 1,543 | 18,511 |

## General costs (Overheads)

| Labour | 400 | 4,800 |
| :--- | :---: | :---: |
| Utilities | 500 | 6,000 |
| Selling and Distribution | 200 | 2,400 |
| Administrative expenses | 200 | 2,400 |
| Shelter | 600 | 7,200 |
| Depreciation (Asset write off) <br> Expenses | 321 | 3,848 |
| Sub-total | 2,221 | 26,648 |
| Total Operating Costs | 3,763 | 45,158 |

Production is assumed for 312 days per year
Depreciation assumes 2 year life of assets written off at $50 \%$ per year for all assets
A production Month is assumed to have 26 work days.

## Project Product costs and Price Structure

| Item | Qty / <br> day | Qty/yr | Unit <br> Cost | Pdn/yr <br> (US\$) | Unit <br> Price | T/ <br> rev(US\$) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Zinc sulphate | 50 | 15,600 | 3 | 45,158 | 5 | 78,000 |

## Profitability Analysis Table

| Profitability Item | Per day | Per <br> Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 250 | 6,500 | 78,000 |
| Less: Production and Operating <br> Costs | 145 | 3,763 | 45,158 |
| Profit | 105 | 2,737 | 32,842 |

## Sources of supply of Equipments

Equipments can be got from Eagle Co.Ltd, China and Kebeln Machinery Co. Ltd, China. They can also be got in Uganda.

## Trade Sector



## MAKING OF READY MADE GARMENTS - JEANS

## Introduction

The business of readymade 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 Readymade 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 1,191 for the first year of project operation generating a revenue potential of USD 4,680,000.

## Market Analysis \& Projected Demand

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.

## Project Costs

Capital Investment Requirements in US\$

## Operating Costs in US\$

| Capital Investment Item | Units | Qty | @\$ | Amount \$ |
| :--- | :---: | :---: | :---: | :---: |
| Zig-zag Machine | No. | 1 | 300 | 300 |
| Iron Boxes | No. | 2 | 80 | 160 |
| Wooden racks | No. | 2 | 73 | 146 |
| Furniture | No. | 3 | 80 | 240 |
| Sewing machine | No. | 1 | 150 | 150 |
| Embroidery machine | No. | 1 | 195 | 195 |
| Total Amount |  |  |  | 1,191 |

## Project Product Costs \& Price Structure

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ day | Prod. Cost/ <br> month | Prod. Cost/ <br> Year |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |

Direct Costs

| Fabric | Mtrs | 3.2 | 4,000 | 12,800 | 332,800 | $3,993,600$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Threads | No. | 1 | 200 | 200 | 5,200 | 62,400 |
| Zips | No. | 0.4 | 1,000 | 400 | 10,400 | 124,800 |


| Buttons | No. | 0.05 | 1,000 | 50 | 1,300 | 15,600 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sub total |  |  |  | 13,450 | 349,700 | $4,196,400$ |

## General Costs (Over heads)

| Rent | 500 | 6,000 |
| :--- | ---: | ---: |
| Labour | 800 | 9,600 |
| Utilities (Power \& Water) | 1,000 | 12,000 |
| Depreciation | 25 | 298 |
| Sub - total | 2,325 | 27,898 |
| Total Operating Costs | 352,025 | $4,224,298$ |

## Project Product Costs \&

Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn Cost/ <br> yr\$ | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Garments | 1000 | 312,000 | 14 | $4,224,298$ | 15 | $4,680,000$ |

## Profitability Analysis

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 15,000 | 390,000 | $4,680,000$ |
| Less: Production \& Operating <br> Costs | 13,450 | 352,025 | $4,224,298$ |
| Profit | 1,550 | 37,975 | 455,702 |

## Sources of Supply of Raw Materials

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

## Government Facilities and Incentives Available

The Government is willing to support Industrialization 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.

## Trade Sector



## MAKING RUBBER ERASERS

## Introduction

An eraser or rubber is an article of stationery that is used for removing pencil and sometimes pen writings. Erasers have a rubbery consistency and are often white or pink, although modern materials allow them to be made in any color. Many pencils are equipped with an eraser on one end. Typical erasers are made from synthetic rubber, but more expensive or specialized erasers can also contain vinyl, plastic, or gum-like materials. Other cheaper erasers can be made out of synthetic soy-based gum

Used by school and college going students, erasers are used in addition to the common pencil erasers and some special type of erasers such as typewriter print erasers, ink erasers, etc., which are used in offices and other establishments. The project cost is US\$ 3,060 producing 624,000 units annually giving estimated revenue of US $\$ 174,720$ per year generating an annual profit of US\$ 9,941 .

## Production process

The process essentially consists of the following steps:
i) Mixing of various ingredients of the rubber compound namely pale crepe, sulphur, white factice, whiting, zinc oxide and other chemicals and colours.
ii) Moulding the same, in the form of desired shapes and sizes. The profiled plant has a minimum capacity of 2,000 rubber erasers per day.

## Capital Investment Requirement in US \$

| Item | Units | Qty | Price | Total |
| :--- | :---: | :---: | :---: | :---: |
| Mixing mill | No | 1 | 560 | 560 |
| Hydraulic | No | 1 | 160 | 160 |
| Grinder machine | No | 1 | 840 | 840 |
| other tools \& equipment | No | 1 | 1,500 | 1500 |
| TCs for equipment |  |  |  | 3,060 |

1. Production costs assumed are for 312 days per year with daily capacity of 2,000 rubbers.
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: e 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 material, supplies and costs

| Cost <br> Item | Units | @ | Qty/ <br> day | Pdn <br> cost/day | Pdn cost/ <br> mth | Pdn <br> cost/yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Direct Costs |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rubber <br> sheets | kgs | 30 | 16 | 481 | 12503.4 | 150,041 |  |
| Sulphur | kgs | 16 | 0.32 | 5.12 | 133.12 | 1,597 |  |
| other <br> chemicals | Itrs | 7.5 | 0.16 | 1.2 | 31.2 | 374.4 |  |
| Packing <br> material | pkts | 0.6 | 9.62 | 5.8 | 150.072 | 1,801 |  |
| Sub-total |  |  |  | 492 | 12,817 | 153,814 |  |

## General Costs (Overheads)

| Labour | 250 | 3,000 |
| :--- | :---: | :---: |
| Selling \& distribution | 100 | 1,200 |
| Utilities (Water, power) | 300 | 3,600 |
| Administration | 50 | 600 |
| Rent | 100 | 1,200 |
| Miscellaneous expenses | 50 | 600 |


| Depreciation | 63.75 | 765 |
| :--- | :---: | :---: |
| Sub-total | 913.8 | 10,965 |
| Total Operating Costs | 13,732 | 164,779 |

## Project product costs and Price structure

| Item | Qty/ <br> day | Qty/yr | Unit <br> cost | Pdn cost/ <br> yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Dehydrated <br> fruits | 2,000 | 624,000 | 0.3 | 164,779 | 0.3 | 174,720 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per <br> month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 560 | 14,560 | 174,720 |
| Less: Production and operating costs | 528 | 13,732 | 164,779 |
| Profit | 32 | 828 | 9,941 |

## Market

The demand for rubber erasers is closely linked with the growth of education and industrial establishments. With the increasing number of schools, colleges, educational institutions and offices, the market for erasers is poised for growth. Hence, there exists scope for new units to tap the market.

## Source of Equipment and Raw Materials

Can be locally fabricated in Uganda by Tonet Ltd kanyanya Gayaza Rd or imported.

## Government Incentive

Startup costs $25 \%$ granted on actual cost over the first four years in four equal installments. Sources of Supply of Raw

## Materials

All raw materials and equipments are imported.

## Market Analysis

The demand for surgical gloves is big in hospitals, pharmaceuticals and research centers.

## Trade Sector

## MAKING EXERCISE BOOKS

## Introduction

This business idea is for manufacturing and marketing of exercise books. Exercise books are stationary items required for schools, offices and other purposes. Their market structure and demand is high since they are used by all school pupils from primary to senior four. They are sold in stationary shops, markets, whole sale shops, retail shops and even on the streets.

## Production Capacity

Production capacity depends on the quantity of raw materials used in production process. The business idea is based on three hundred working days, single shift of 8 hr .per day. The smallest viable unit can produce 2,000 Exercise books of 96 pages per day, translating into 624,000 Exercise books of 96 pages per annum at a sales Price of US $\$ 0.25$ each. The revenue potential is estimated at US $\$ 156,000$ per month, translating into US $\$ 1,872,000$ per annum and total investment requirement is US $\$ 71,390$ for the first year of project operation.

## Technology and process Description

Manufacturing of exercise books involves use of Double Side Disc Ruling Machine size 915 mm Hand Feed with motor and starter, Paper and Board Cutting Machine hand operated, and power driven Cutting width 990 mm with mortar and starter, Wire Stitching Machine power operated with motor and starter capacity 25 mm , Press $460 * 610 \mathrm{~mm}$, Offset Printing Machine complete with accessories \& electrical. The production process involves ruling of lines on the paper in red \& blue ink, folding of paper, cutting of
paper, cutting of outer cover, printing of outer cover, folding of the outer cover \& stitching of cover and pages, Inspection and packing.

## Scale of Investment, Capital Investment Requirements

 The scale of Investment is relatively big as it involves buying many different machines and equipment.
## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Double side disc ruling <br> machine | No | 1 | 12,500 | 12,500 |
| Paper and board cutting <br> machine | No | 1 | 9,800 | 9,800 |
| Wire stitching machine | No | 1 | 3,490 | 3,490 |
| Offset printing Machine with <br> all Electronic accessories | No | 1 | 31,000 | 31,000 |
| Working tools | Set | 2 | 1,700 | 3,400 |
| Delivery Van | No | 1 | 11,200 | 11,200 |
| Total |  |  |  | 71,390 |

## Production and Operating Costs

## Direct Materials, Supplies and Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | cost/ <br> day | cost/ <br> mth | cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Reams of Paper (size <br> A3) | No | 5 | 16 | 80 | 2080 | 24960 |
| Craft Paper in <br> different colours (for <br> covers) | No | 0.85 | 400 | 340 | 8840 | 106080 |
| Printing Ink | Liter | 28 | 1 | 28 | 728 | 8736 |
| Stitching Wires | Packet | 0.5 | 2 | 1 | 26 | 312 |
| Gum | Liter | 0.81 | 5 | 4.05 | 105.3 | 1263.6 |
| Sub-total |  |  | 424 | 453.05 | 11,779 | 141,352 |

## General Costs(Overheads)

| Rent | 1,000 | 12,000 |
| :--- | :--- | :--- |
| Labour | 625 | 7,500 |


| Utilities(power) | 120 | 1,440 |
| :--- | :--- | :--- |
| Preliminary Costs | 250 | 3,000 |
| Miscellaneous Costs | 150 | 1,800 |
| Depreciation(Asset write off)Exp | 595 | 7,139 |
| Sub-total | 2,740 | 32,879 |
| Total Operating Costs | 14,519 | 174,231 |
| Pro |  |  |

Production costs assumed 312 days per year with a daily capacity of 2,000 exercise books of 96 pages
Depreciation (fixed asset write off) assumes 4 years life of assets written off at _10\% per year for all assets.
Direct Costs include materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 days

## Project Product and Price Structure in US\$

| Item | Qty/ <br> day | Qty/Yr | @ | Pdn <br> cost/Yr | UPx | $\mathrm{T} / \mathrm{rev}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Exercise books of <br> 96 pages | 2,000 | 624,000 | 0.3 | 174,231 | 3 | $1,872,000$ |

## Project Analysis in US\$

| Profitability Item | Per day | Per <br> Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 6000 | 156,000 | $1,872,000$ |
| Less: Production and Operating Costs | 558 | 14,519 | 174,231 |
| Profit | 5442 | 141,481 | $1,697,769$ |

## Market Analysis

There is ready market throughout the country as more and more children go to school. The UPE programme has boosted the numbers.

## Source of Supply of Machinery, Equipments and Raw

## Materials

The supply of raw materials, Machinery and Equipments is procured locally although it could also be imported from countries like Japan, South Africa and Chain.

## Government Facilities and Incentives Available

There are low tax rates and sometimes no taxes at all on most of the industrial equipments and raw materials.

## Trade Sector



## MAKING DESIGNER COTTON BAGS

## Introduction

Cotton bags are environmentally friendly products and can be a perfect replacement for polythene and plastic bags. The business profile is targeted towards production of 32,760 bags in the first year of operation with an initial investment fixed capital totaling to US $\$ 5,150$ \& estimated revenue of US $\$ 144,144$ in the first year of project operation. The project is also expected to yield a net profit of $44 \%$.

## Production Capacity, Technology \& Process

The production process involves cutting different sizes of cotton cloth pieces and then stretching them on a stretching machine. The stretched pieces are tailored into different sizes and designs using a sewing machine. Where it is necessary to include company labels and designs, they can be sewn or just printed to add value to the products.

Investment Scale, Capital Requirements and Equipment
The investment scale greatly depends on the objectives of the entrepreneur and the machines production capacity. But on a relatively small scale production, the capital requirements and equipment are as tabled bellow.

## Capital Investment Requirements in US\$

| Capital investment item | units | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Stretching Machine | No | 2 | 300 | 600 |
| Sewing Machine | No | 2 | 1,000 | 2,000 |
| Furniture | No | - | - | 1,400 |
| Art printing Machine | No | 1 | 400 | 400 |
| Other tools | No | - |  | 750 |
| Total |  |  |  | 5,150 |

## Production and Operating Costs in US\$

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

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/day | Pdn cost/ <br> mth | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct costs |  |  |  |  |  |  |
| Cotton Cloth | Mtrs | 2 | 45 | 90 | 2,340 | 28,080 |
| Thread | Rolls | 2 | 4 | 3 | 78 | 936 |
| Printing Paint | Ltrs | 5 | 7 | 35 | 910 | 10,920 |
| Cotton wool | Rolls | 6 | 10 | 60 | 1,560 | 18,720 |
| Sub-total |  |  | 66 | 188 | 4,888 | 58,656 |

## General Costs(Overheads)

| Labour | 533 | 6,400 |
| :--- | :---: | :---: |
| Rent | 600 | 7,200 |
| Utilities | 178 | 2,140 |
| Selling \& distribution | 225 | 2,700 |
| Miscellaneous expenses | 146 | 1,750 |
| Depreciation | 107 | 1,288 |
| Sub-total | 1,789 | 21,478 |
| Total Operating Costs | 6,677 | 80,134 |

1) Pactur
2) Production costs assumed are for 312 days per year with daily capacity of producing 105 pieces of cotton bags.
3) Depreciation (fixed asset write off) assumes 4 -years life of assets written off at $25 \%$ per year for all assets.
4) Direct costs include: materials, supplies and other costs that directly go into production of the product.
5) Total monthly days assumed are 26 -work days.
6) The valuation currency used is United States Dollars

## Market Analysis

The market is very easy to explore as the government is trying to ban the use of polythene bags.
Project product costs and Price Structure

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Pdn <br> cost/yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Designer Cotton <br> Bags | 105 | 32,760 | 3.10 | 80,134 | 4.4 | 144,144 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per <br> Month | Per Year |
| :--- | :---: | ---: | ---: |
| Revenue | 462 | 12,012 | 144,144 |
| Less: Pdn \& Operating Costs | 257 | 6,678 | 80,134 |
| Profit | 205 | 5,334 | 64,011 |

## Government Facilities \& Incentives

The government is trying to phase out environmentally unfriendly products like polythene \& plastic bags and therefore any intervention that will lessen environmental degradation such as use of cotton bags will be welcomed by the government.

## Trade Sector

## MAKING SCOURING POWDER

## Introduction

Scouring powder is a widely used household product. It is used in cleaning of metallic and ceramic products such as: tiles, toilet bawls, bathtubs \& rinsing sinks etc.

## Production Capacity Technology \& Process

The production process involves the mixing of baking soda, salt, and borax powder in the right quantities and then the mixture is stored in an air tight container. Production capacity of $99,840 \mathrm{kgms}$ of scouring powder in the first year of operation and a total annual revenue of US $\$ 53,914$ can be realized when a total operating cost of US $\$ 32,319$ is injected into the project. The net profit margin is $40 \%$ and the pay back is 1 year and 3 months

## Investment Scale, Capital Requirements and Equipment

The investment scale largely depends on the production capacity and the ease with which raw materials are acquired.

The major equipment required includes the following items as tabled bellow.

## Capital Investment Requirements

| Capital investment item | units | Qty | $@$ | Total(\$) |
| :--- | :---: | :---: | :---: | :---: |
| Mixer | No | 1 | 400 | 400 |
| Air tight Container | No | 1 | 500 | 500 |
| Delivery Van(0.5 -tone) | No | 1 | 4,000 | 4,000 |
| Furniture \& Fixture | No | - | - | 1,200 |
| Weighing Scale | No | 1 | 200 | 200 |
| Other Tools | No | - | - | 1,200 |
| Total |  |  |  | 7,500 |

## Production and Operating Costs

(a)Direct materials, Supplies and Costs


## Direct Costs

| Salt | Kgs | 0.4 | 16 | 6 | 167 | 2,000 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Borax <br> Powder | Kgs | 0.35 | 32 | 11 | 292 | 3,500 |
| Baking <br> Soda | Kgs | 0.4 | 32 | 13 | 333 | 3,994 |
| Packaging <br> Materials | Pcs | 0.08 | 160 | 13 | 333 | 4,000 |
| Other <br> materials |  | - | - | - | 83 | 1,000 |
| Sub-total |  |  | 240 | 43 | 1208 | 14,494 |

## General Costs(Overheads)

| Labour | 292 | 3,500 |
| :--- | :---: | :---: |
| Rent | 267 | 3,200 |
| Utilities | 267 | 3,200 |
| Selling \& distribution | 225 | 2,700 |
| Cleaning \& Toiletries | 154 | 1,850 |
| Miscellaneous expenses | 125 | 1,500 |
| Depreciation | 156 | 1,875 |
| Sub-total | 1,485 | 17,825 |
| Total operating Costs | 2,693 | 32,319 |

1) Production costs assumed are for 312 days per year with daily capacity of producing 320 kg of scouring powder.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars

## Market Analysis

The market exists widely in urban areas and the product can easily be supplied to supermarkets, wholesale and retail shops. Big producers such as: Mukwano Industries Ltd and Unilever Uganda Ltd may affect production costs and Price of new entrants as they produce at relatively low costs since they enjoy the economies of large scale production.

## Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | @ | Pdn cost/ <br> yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Scouring <br> Powder | 320 | 99,840 | 0.32 | 32,319 | 0.54 | 53,914 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 173 | 4,493 | 53,914 |
| Less: Production\& Operating <br> Costs | 104 | 2,693 | 32,319 |
| Profit | 69 | 1,800 | 21,595 |

## Government Facilities \& Incentives

Poverty eradication programs such as "Bonna Bagagawale"are aimed at financing such projects. There is also the European investment fund.

## Trade Sector



## MAKING PAPER ENVELOPES

## Introduction

Paper envelopes are stationery products that can easily be marketed as the users and consumers are very many such as government organizations, schools, courier organizations and individual consumers.

The establishment of this project requires total operating costs of US $\$ 122,412$, generating revenue of US $\$ 312,000$ in the first year of operation. The net profit margin is $61 \%$.

## Production Capacity, Technology \&Process

A paper cutting machine is used to cut different paper pieces to sizes as wanted by the operator for the type and size of envelopes to be produced. Binding glue is then applied to the cut sides of the paper and later they are joined together. Labeling can be done thereafter. The envelopes are then packed ready for distribution.

## Capital Investment Requirements in US\$

| Capital investment item | units | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Paper Cutting machine | No | 1 | 250 | 250 |
| Rulers | No | 100 | 0.4 | 40 |
| Pencils | No | 300 | 0.04 | 12 |
| Glue Sticks | No | 125 | 1.6 | 200 |
| Scissors | No | 34 | 4 | 136 |
| Furniture | No | - | - | 300 |
| Other tools | No | - | - | 400 |
| Total |  |  |  | 1,338 |

## Production and Operating Costs in US\$

Production costs assumed are for 312 days per year with daily capacity of producing 5,000 pieces of paper envelopes.

1. Depreciation (fixed asset write off) assumes 4 -years life of assets written off at $25 \%$ per year for all assets.
2. Direct costs include materials, supplies and other costs that directly go into production of the product.
3. Total monthly days assumed are 26 -days.
4. The valuation currency used is United States Dollars.

## Direct Materials, Supplies and Costs

| Cost <br> Item | Units | @ | Qty/ <br> day | Pdn <br> cost/day | Pdn cost/ <br> mth | Pdn <br> cost/ $/ \mathrm{Yr}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |


| Direct Costs |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Wall Paper <br> Samples | Mtrs | 1.5 | 20 | 30 | 780 | 9,360 |
| Bonded <br> Paper | Mtrs | 2 | 34 | 68 | 1768 | 21,216 |
| Decorative <br> Paper | Mtrs | 10 | 22 | 220 | 5720 | 68,640 |
| Printer <br> Paper | Reams | 1.5 | 10 | 15 | 390 | 4,680 |
| Glue | Ltrs | 4 | 3 | 12 | 312 | 3,744 |
| Old <br> Calendars <br> Pictures | Mtrs | 2 | 5 | 10 | 260 | 3,120 |
| Other <br> materials |  | - | - | - | 121 | 1,452 |
| Sub-total |  |  | 143 | 355 | 9,351 | 112,212 |

General Costs (Overheads)

| Labour | 250 | 3,000 |
| :--- | :---: | :---: |
| Utilities | 150 | 1,800 |
| Rent | 100 | 1,200 |
| Selling \& distribution | 100 | 1,200 |
| Cleaning \& toiletries | 50 | 600 |
| Miscellaneous expenses | 100 | 1,200 |
| Depreciation | 100 | 1,200 |
| Sub-total | 850 | 10,200 |
| Total Operating Costs | 10,201 | 122,412 |

## Market Analysis

Stationery products have a high demand by many institutions such as: schools, Government bodies, Stationery shops, NGOS and individual buyers.

## Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | @ | Pdn <br> cost/yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Paper <br> Envelopes | 2,500 | 780,000 | 0.08 | 119,884 | 0.4 | 312,000 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1000 | 26,000 | 312,000 |
| Less: Production \&Operating Costs | 392 | 10,201 | 122,412 |
| Profit | 608 | 15,799 | 189,588 |

## Government Facilities \& Incentives

Some Stationery products are zero rated products.

## Trade Sector



## MAKING SERVIETTES

## Introduction

A serviette is a small piece of table linen that is used to wipe the mouth and to cover the lap in order to protect clothing when eating Made out of light absorbent material, napkins are soft to absorb sweat and clean the mouth. The market is constituted by individual consumers, hospitals, restaurants, homes and hotels among others. The business idea aims at production of 2,600 packets of serviettes per month which translates into 31,200 packets annually. The revenue potential is estimated at 11,180 dollars per month, translating into 134,160 dollars per year The total capital investment for the project is 3,635 dollars. The net profit margin is estimated at $29 \%$ with a payback period of 3 months.

## Plant Capacity

The profiled plant is expected to produce 40,560 units (each unit with 10 packs of 50 pieces each) per annum.

## Technology and Production Process

To make serviettes, a hand driven knitting machine and a yarn twister are used. The raw materials include Cotton staple yarn, absorbent thread, cotton thread, cardboard boxes and craft papers

Cotton staple yarn is knitted into loose fabric tube, cut to required pieces of absorbent cottons with the ends of the napkins tied by thread and packed in printed polythene bags.

## Scale of Investment

## Capital Investment Requirements

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Hand driven Knitting Machine | No | 1 | 3,462 | 3,462 |
| Yarn Twister | No | 1 | 173 | 173 |
| Total |  |  |  | 3,635 |

## Production and Operation costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Prod. <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod <br> Cost/ <br> Year1 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |

## Direct costs3:

| Cotton staple yarn | Yarns | 3 | 40 | 120 | 3,120 | 37,440 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Absorbent thread | No | 3 | 30 | 90 | 2,340 | 28,080 |
| Cotton thread | Yarns | 3 | 10 | 30 | 780 | 9,360 |
| Cardboard boxes | No | 0.76 | 5 | 3.8 | 99 | 1,186 |
| Craft papers | No | 1.7 | 15 | 25.5 | 663 | 7,956 |
| Sub-total |  |  |  |  | 7,002 | 84,022 |

## General costs (Overheads)

| Labour | 250 | 3,000 |
| :--- | :---: | :---: |
| Utilities | 300 | 3,600 |
| Selling and Distribution | 100 | 1,200 |
| Administrative expenses | 100 | 1,200 |
| Shelter | 150 | 1,800 |
| Depreciation machinery | 76 | 909 |
| Sub-total | 976 | 11,709 |
| Total Operating Costs | 7,978 | 94,673 |
| Production is assumed for 312 days pr |  |  |

Production is assumed for 312 days per year.
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
A production Month is assumed to have 26 days.

## Project Product costs and Price Structure \$

| Item | Qty / <br> day | Qty/yr | @ | Pdn/ <br> yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Plain Serviettes | 70 | 21,840 | 3 | 66,271 | 4 | 87,360 |
| Decorated <br> Serviettes | 30 | 9,360 | 3 | 28,402 | 5 | 46,800 |
| Total | 100 | 31,200 | 6 | 94,673 | 9 | 134,160 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :---: |
| Revenue | 430 | 11,180 | 134,160 |
| Less: Production and Operating <br> Costs | 303 | 7,889 | 94,673 |
| Profit | 127 | 3,291 | 39,487 |

## Sources of Supply of Raw Materials and Equipments

All equipments and raw materials can be sourced locally.

## Government Facilities and Incentives

There are a number of government programme to facilitate industrialists. Among them is Private Sector Foundation Uganda which builds capacity and develops business plans and feasibility studies for investors.

## Market Analysis

The Market cuts across Individual consumers, hospitals, restaurants, homes and hotels among others. However, there are many competitors thus the need for exploiting the export market.

## Trade Sector



## SETTING UP A BEAUTY SALOON

## Indtroduction

This business idea is aimed at setting up a Barber's shop. The idea is premised on making different hair styles and haircuts for both males and females. The business has a good market demand due to the changing fashion of hair trends among Ugandans especially the youths. The revenue potential is estimated at US\$ 1,560 per month which translates into US $\$ 18,720$ per year. The total project cost is US $\$ 12,639$ annually. The net profit margin is estimated at $36 \%$ and the payback period is 4 months.

## Process Description

Depending on the customer's desired style or service being sought for.

## Capital Investment Requirements in US Dollars

| Item | Unit | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Water kettle | No. | 1 | 40 | 40 |
| Towels | No. | 20 | 1.3 | 26 |
| Sink | No. | 2 | 10 | 20 |
| Aprons | No. | 5 | 1.8 | 9 |
| Furniture | No. |  |  | 300 |
| Shavers | No. | 5 | 30 | 150 |
| Fan | No. | 2 | 52 | 104 |
| Wall Styling mirrors | No. | 3 | 20 | 60 |
| Combs | Sets | 3 | 10 | 30 |
| TC of Machinery |  |  |  | 739 |

## Production and Operating Costs in US\$

Direct Materials, Supplies and Costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Prod. <br> cost/ day | Prod. Cost// <br> month | Prod. <br> Cost/ year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| After shave | Tins | 8 | 1 | 8 | 208 | 1,664 |
| disinfectants | Tins | 4 | 1 | 4 | 104 | 1,248 |
| Spray | Tins | 15 | 1 | 15 | 390 | 4,680 |
| Powder | Tins | 2 | 1 | 2 | 52 | 624 |
| Sub-total |  |  |  |  | 754 | 8,216 |

## General costs (Overheads)

| Utilities (power) | 15 | 180 |
| :--- | :---: | :---: |
| (Utilities (water) | 10 | 120 |
| Salaries | 150 | 1,800 |
| renting | 120 | 1,440 |
| Depreciation (Assets write off) Expenses | 12 | 144 |
| Sub-total | 307 | 3,684 |
| Total Operating costs | 1,061 | 11,900 |

Production costs assumed are for 312 days per year with a daily capacity of 30 Customers.
Depreciation is charged on electrical equipment and furniture and assumes 2 years life of assets write off at $25 \%$ per year for all assets.
Direct costs include: materials, supplies and other costs that directly go into production of the product.

## Product Cost and Price Structure In US\$

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Prod. Cost <br> /year | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Hair cuts | 30 | 9,360 | 1.2 | 11,900 | 2 | 18,720 |

## Profitability Analysis in US\$

| Profitability item | per day | per month | per year |
| :--- | :---: | :---: | :---: |
| Revenue |  |  |  |
| Hair cuts | 60 | 1,560 | 18,720 |
| Less Prod \& Operating Costs | 38 | 992 | 11,900 |
| Profit | 22 | 568 | 6,820 |

## Market Demand

The business has a great market demand in both rural and urban areas throughout the year and a higher demand during festive seasons.

## Equipment Suppliers

All these equipments can be purchase from the local market.

## Risk certainty

However the risks involved include fire outbreak of fire, however this can be solved through insurance of the business.

## Trade Sector



## MAKING PLASTIC ROPES

## Introduction

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.

The capital investment required is US $\$ 13,178$ generating TR of US $\$ 468,000$ per year with an annual profit level of US $\$ 102,052$. However, the payback period is estimated at 2 months.

## 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:
Prepare raw materials and monomers
Carry out polymerization reactions
Process the polymers into final polymer resins.
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 \& Projected Demand

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.

## Project Costs

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

## Capital Investment Requirements in US\$

| Capital Item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Delivery Van | No. | 1 | 3,000 | 3000 |
| Molding Machine | No. | 1 | 3,000 | 3000 |
| Crushing Machine | No. | 1 | 3,000 | 3000 |
| Injection Machine | No. | 1 | 2,500 | 2500 |
| Boiler | No. | 1 | 1,500 | 1500 |
| Furniture | No. | 3 | 30 | 150 |
| Weighing Scale | No. | 1 | 28 | 28 |
| Total Amount |  |  |  | 13178 |

## Operating Costs in US\$

| Item | Units | $@$ | Qty/ <br> day | Prod. <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/ <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Direct Costs |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Compounded <br> Plastics | Kgs | 0.2 | 3000 | 600 | 15,600 | 187,200 |  |
| Chemicals | Litres | 1.5 | 300 | 450 | 11,700 | 140,400 |  |
| Sub total |  |  |  | 1,050 | 27,300 | 327,600 |  |

## General Costs (Over heads)

| 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 |
| Sub - total | 3,196 | 38,348 |
| Total Operating Costs | 30,496 | 365,948 |

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

| Item | Qty/day | Qty/yr | @S | Pdn Cost/yrs | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Ropes | 1000 | 312,000 | 1.3 | 404,970 | 1.5 | 468,000 |

## 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 |
| Profit | 450 | $8,504.4$ | 102,052 |

## Sources of Supply of 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.

## 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.

## Trade Sector



## RECYCLING PLASTICS

## Introduction

This business idea is premised on production of 36,400 plastic products per month which translates into 436,800 products per year. The revenue potential is estimated at US $\$ 21,331$ per month which translates into US $\$ 255,975$ per year. The project cost is US $\$$ 11,028 . Net profit is estimated at $72 \%$. Payback is 3 months.

The demand for this idea is high due to the growing demand for Plastic products.

## Production Process

The production process involves cleaning waste plastic, sorting plastics according to their grades, cutting to small pieces, extruding or crushing the plastics to get required sizes of granules. Chemicals are mixed with the crushed plastic to reinstate its originality. The mixture is then put into a boiler, melted before transfer into the injection machine that sends it to the molding machine. The finished product is removed from the molds, taken for trimming and packed.

## Capital Investment Requirements in US \$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Weighing scale | No. | 1 | 28 | 28 |
| Molding machine | No. | 1 | 3,000 | 3,000 |
| Injection machine | No. | 1 | 2,500 | 2,500 |
| Boiler | No. | 1 | 1,500 | 1,500 |
| Crushing machine | No. | 1 | 3,000 | 3,000 |
| Hand tools | No. | 20 | 50 | 1000 |
| TC of Machinery |  |  |  | 11,028 |

## Production and Operating Costs in US \$

| Cost Item | Units | @// <br> day | Qty/ <br> day | Prod. <br> cost/ <br> day | Prod. <br> cost/ <br> month | Prod. <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Plastics/scrap | tones | 250 | 1 | 250 | 6,500 | 78,000 |
| Chemicals (PVC/ <br> DBP) | Ltrs | 0.5 | 20 | 10 | 260 | 3,120 |
| Sub-total |  |  |  |  | 6,760 | 81,120 |

## General costs (Overheads)

| Utilities (power) | 150 | 1,800 |
| :--- | :---: | :---: |
| (Utilities (water) | 15 | 180 |
| Salaries | 350 | 4,200 |
| Renting | 200 | 2,400 |
| Depreciation (Assets write off) Expenses | 834 | 10,005 |
| Sub-total | 1,549 | 18,585 |
| Total Operating costs | 8,309 | 99,705 |

Production costs assumed 312 days per year with a daily capacity of 500 Sealing Wax
Depreciation (fixed assets write off) assumes 4 years life of assets write off of $25 \%$ per year for all assets
Direct costs include materials, supplies and other costs that directly go into roduction of the product

Project product costs and Price structure \$

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Prod. Cost <br> /year | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Ladies shoes | 200 | 62,400 | 0.2 | 14,244 | 1.5 | 93,600 |
| Soles | 200 | 62,400 | 0.2 | 12,480 | 1.5 | 93,600 |
| Front heels | 500 | 156,000 | 0.2 | 31,200 | 0.5 | 78,000 |
| Hind Heals | 300 | 93,600 | 0.2 | 18,720 | 0.3 | 28,080 |
| Sandals | 200 | 62,400 | 0.2 | 12,480 | 1 | 62,400 |
|  | 1,400 | 436,800 |  | 31,200 |  | 355,680 |

## Profitability Analysis in US \$

| Profitability item | per day | per month | per year |
| :--- | :---: | :---: | :---: |
| Revenue |  |  | TR |
| Ladies shoes | 300 | 7,800 | 93,600 |
| Soles | 300 | 7,800 | 93,600 |
| Front heels | 250 | 6,500 | 78,000 |
| Hind Heals | 90 | 2,340 | 28,080 |
| Sandals | 200 | 5,200 | 62,400 |
| Less: Prod \& Operating Costs | 320 | 8,309 | 99,705 |
| Profit | 820 | 21,331 | 255,975 |

## Market

There is a growing demand for Plastic products across the country. Plastic products are also sold to the neighboring countries such as: Rwanda, Burundi and Congo. Crushed materials of plastics can also be sold to other big companies in form of raw materials.

## Government Incentives Available

Government is encouraging the development of small scale industries in a bid to curb poverty and create employment.

## Suppliers

Plastics are purchased from local individuals at a relatively cheaper Price all over the country. Some of the machinery needed can be fabricated locally.

## Trade Sector



## BOLTS AND NUTS

## Introduction

A bolt is a cylindrical piece of metal that fastens objects together while nut is a hexagonal or square piece with a threaded hole at the centre. Nuts and bolts have a high market demand in the industrial sector.The business idea aims at production of 2,600 kilograms of bolts and nuts per month. The revenue potential is estimated at US\$ 241,800 per year with a sales margin of $10 \%$. The total capital investment for the project is US $\$ 19,113$.

## Production Capacity

The envisaged plant will have a capacity of 100 kilograms of bolts and nuts per day when operating a single shift of eight hours a day for 300 days within a year.

## Production process

The head of the bolt is formed after feeding steel rod into a double stroke cold header machine. Later, using a bolt head trimmer, the bolt is machined to square or hexagonal shape and the threads are cut on a thread-rolling machine. For nuts, steel rods are fed into an automatic nut forking machine and the nuts in a semi-finished form are then fed into a tapping machine for internal threading.

## Scale of investment

## Capital requirements

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Grinder | No | 1 | 750 | 750 |
| Sealing machine | No | 5 | 31 | 155 |
| Weighing machine | No | 2 | 80 | 160 |
| Filling machine | No | 2 | 2000 | 2000 |
| Delivery Van | No | 1 | 7,000 | 7,000 |
| Trays | No | 25 | 3 | 75 |
| Fermenting materials | No | 10 | 3 | 30 |
| Dark shade | No | 1 | 1,500 | 1,500 |
| Furniture \& Fixture | set | 5 | 400 | 2,000 |
| Other tools | No | - | - | 840 |

Production is assumed for 312 days per year.
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
A production Month is assumed to have 26 work days.

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost/ <br> month | Pdn <br> Cost/ <br> Year1 |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |

## Direct costs3:

| MS Rounds | Kgs | 8 | 100 | 400 | 10,400 | 124,800 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Pickling Chemicals | Kgs | 7 | 20 | 140 | 3,640 | 43,680 |
| Packaging <br> Materials | Pieces | 0.2 | 50 | 10 | 260 | 3,120 |
| Subtotal |  |  |  |  | 14,300 | 171,600 |

General costs (Overheads)

| Labour | 400 | 4,800 |
| :--- | :---: | :---: |
| Utilities | 200 | 2,400 |
| Selling and Distribution | 100 | 1,200 |
| Administrative expenses | 150 | 1,800 |
| Shelter | 400 | 4,800 |
| Depreciation (Asset write off) Expenses | 398 | 4,778 |
| Sub-total | 1,648 | 19,778 |
| Total Operating Costs | 15,948 | 191,378 |

## Project product Costs and Price Structure \$

| Item | Qty /day | Qty/yr | @ | Pdn/yr | UPx | T/ revenue |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bolts | 50 | 15,600 | 6 | 95,689 | 8 | 117,000 |
| Nuts | 50 | 15,600 | 6 | 95,689 | 8 | 124,800 |
| Total | 100 | 31,200 |  | 191,378 |  | 241,800 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 775 | 20,150 | 241,800 |
| Less: Production and Operating <br> Costs | 613 |  | 15,948 |
| Profit | 162 | 4,202 | 50,422 |

## Government Facilities and Incentives

The Government has liberalized the economy and encouraged people to invest in industrial set up through incentives like low tax rates and deferred tax payments.

## Sources of Supply of Equipment

All equipment can be got from the local market at lower costs.

## Trade Sector



## LEATHER PURSES

## Introduction

Real leather purses are made out of animal hides, fish skins. It is a garget for keeping money and other documents. It is commonly known as money purse wallet simply because people use it to keep in their money in the pockets of the handbags.

## Production Capacity and Process

The production capacity per day is 500 pieces of leather purses and monthly production is about 13,000 purses, which translates into an annual production of 156,000 pieces of Leather purses/wallets. The Price per leather wallet is US\$ 3.5 and this means US $\$ 1,750$ gross revenue per day hence monthly gross revenue US $\$ 45,500$ which translates into annual gross revenue of US $\$ 54600$.

## Technology and Process of Production

This business idea involves the use of strap cutting machine, stitching machine and working tools. The process involves the strap cutting, stitching, dying and designing the product as well as fixing fasteners and punching zips.

## Capital Investments Requirements in US\$

| Capital Investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Sewing machine | Number | 2 | 520 | 1,040 |
| Leather tarning Machine | Number | 1 | 880 | 880 |
| Strap cutting | Number | 1 | 944 | 944 |
| Punching Zips | No. | 1 | 630 | 630 |
| Other equipment |  | 1 | 520 | 520 |
| Sub-total |  |  |  | 4,014 |
| Land |  | 2 | 5,000 | 10,000 |
| Total Investment |  |  |  | 14,014 |

## Production and operating costs in US\$

| Cost item | @/dy | Qty/dy | Cost/ <br> dy | Cost/ <br> mnth | Cost/yr |
| :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Turned leather | 12 | 100 | 1200 | 31,200 | 374,400 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Dye | 3 | 30 | 90 | 2,340 | 28,080 |
| Threads | 0.8 | 120 | 96 | 2,496 | 29,952 |
| Subtotal | 15.8 | 250 | 1,386 | 36,036 | 432,432 |

## General Costs (Overheads)

| Administration expenses | 542 | 6,500 |
| :--- | :---: | :---: |
| Labour | 2,250 | 27,000 |
| Utilities | 650 | 7,800 |
| Rent | 700 | 8,400 |


| Selling \& Distribution | 300 | 3,600 |
| :--- | :---: | :---: |
| Depreciation | 84 | 1,004 |
| Miscelleneous | 208 | 2,500 |
| Subtotals | 4,734 | 56,804 |
| Total operating Costs | 40,770 | 489,236 |

## Market Analysis

It is projected that leather purses have a ready market in Uganda and East African countries because of their high quality despite the competition with bark cloth purses which are not durable.

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

| Item | Qty/day | Qty/year | @ | Prodn/ <br> year | UPx | Rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Lether purse | 500 | 156,000 | 3.14 | 489,236 | 3.5 | 546,000 |

## Profitability Analysis in US \$

| Profitability item | Per day | Per month | Per year |
| :--- | :---: | :--- | :--- |
| Revenue | 1,750 | 45,500 | 546,000 |
| Less: Production operating <br> costs | 1,568 | 40,770 | 489,236 |
| Profit | 182 | 4,730 | 56,765 |

## Sources of Supply of Machinery, Equipment and Raw <br> Materials

Machinery is available on the local market along Entebbe road or can be imported from China and India while raw materials can be bought locally from the industrial area in Kampala and from Uganda Leather tanning Industry Limited in Jinja.

## Trade Sector



## MANUFACTURING SPRAY PAINTING

## Introduction

Spray painting is a technique where a device sprays a coating (paint, ink, vanish) through the air onto a surface. It leaves the surface uniform and bright, and above all, gives the product an elegant look. It protects the metal from rusting and makes it weather proof. The business idea aims at creation of 1,560 job works per annum with persons spraying cars. The revenue potential is estimated at US\$ 24,700 per month, translating into US $\mathbf{2 3 4 , 0 0 0}$ per year with a sales profit of $\$ 23,446$ the total capital investment for the project is US $\$ 3,434$.

The profiled project has a minimum capacity of 1,560 job works per annum.

## Technology and Production Process

The equipment used includes: an Air Compressor, a Spray Gun and an HVLP Paint Sprayer and other equipments. The raw materials are paint hardener and thinner. Paint is poured in the spraying gun and sprayed uniformly with the help of a compressor.

## Capital requirements in US $\$$

| Capital Investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Air compressor | No | 1 | 2,450 | 2,450 |
| Spray gun | No | 1 | 235 | 235 |
| HVLP Paint | No | 1 | 499 | 499 |
| Other equipment | Number | 1 | 50 | 250 |
| Total |  |  |  | 3,434 |

## Production and operating costs in US \$

| Cost item | Units | @/ <br> day | Qty/ <br> day | Cost/ <br> day | Cost/ <br> month | Cost/ <br> year |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |

## Direct Costs

| Paint | liters | 30.0 | 10 | 300 | 7,800 | 93,600 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Hardener | liters | 25.0 | 5 | 125 | 3,250 | 39,000 |
| Thinner | liters | 11.5 | 10 | 115 | 1,708 | 20,496 |
| Subtotal |  | 66.5 | 25 | 540 | 12,758 | 153,096 |

## General Costs(Overheads)

| Administration expenses | 542 | 6,500 |
| :--- | :---: | :---: |
| Labour | 2,083 | 25,000 |
| Utilities | 650 | 7,800 |
| Rent | 1,000 | 12,000 |
| Selling \& Distribution Expenses <br> (Advertising) | 233 | 2,800 |
| Depreciation | 72 | 859 |
| Miscellaneous | 208 | 2,500 |
| Subtotals | 4,747 | 56,959 |
| Total operating Costs | 17,546 | 210,555 |

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

| Item | Qty/ <br> day | Qty/ <br> year | @ | Prod./ <br> year | UPx | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Saloon car | 5 | 1,560 | 134.97 | 210,555 | 150 | 234,000 |

## Profitability Analysis

| Profitability item | Per day | Per <br> month | Per year |
| :--- | ---: | ---: | ---: |
| Revenue | 750 | 19,500 | 234,000 |
| Less: Production operating costs | 675 | 17,546 | 210,555 |
| Profit | 75 | 1,954 | 23,446 |

## Sources of Supply of Equipments

All equipments are imported, but could also be got from the local market from places such as: Casement (U) Limited. Materials that can be got from Uganda include: Sadoline paint and other local paint manufacturers.

## Market Analysis

Apart from being used in the normal construction procedures, this technique can be employed for painting steel furniture, two wheelers, three wheelers and tractors. This is most suitable in places where automobiles and tractors are aplenty.

## Government Facilities and Incentives Available

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

## Trade Sector



## MAKING PRINTED SHOPPING BAGS

## Introduction

Shopping bags or carrying bags are made from LD/LLDPE plastic, which are used by traders and business houses with their firm names printed in multi -colours using off set printers. This project involves capital of US $\$ 153,638$ which in return brings in gross profits of US $\$ 112,320$ with a profit margin of US $\$ 23,030$ per annum. The bags are not only convenient, but are also a means of advertising and sales promotion. What is proposed here is to set up plant to make printed shopping bags, which are environmentally friendly since they can be recycled.
Production Capacity The proposed plant would have a minimum capacity of 150 tonnes per annum. The shopping bag production capacity is about 89,290 units of bags per annum.

## Production Capacity, Technology and Process

LD/LLDPE mixture after feeding to the blown film extruder, are melted and pumped out in the form of a tube, which is blown into a bubble and collapses to form a lay flat. The lay flat is given corona treatment and printed in flex printing machine. The film is converted into a bag by attaching a handle and sealing the bottom.
Capital Investments requirements in US\$

| Capital Investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Film Blowing machine | No | 1 | 1,100 | 1,100 |
| Printing Machine | No | 1 | 580 | 580 |
| Rocker Hydraulic pressure <br> cutting | No | 1 | 944 | 944 |
| Paper bag making machine | No | 1 | 830 | 830 |
| Other equipment |  | 1 | 520 | 520 |
| Total |  |  |  | 3,974 |

## Production and operating costs in US \$

| Cost item | Units | @/ <br> day | Qty/ <br> day | Cost/ <br> day | Cost/ <br> month | Cost/ <br> year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Direct Costs

| Turned leather | Kg | 0.8 | 50 | 40 | 1,040 | 12,480 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Dye | Itrs | 0.5 | 20 | 10 | 260 | 3,120 |
| Water | Itrs | 0.6 | 10 | 6 | 1,708 | 20,496 |
| Subtotal |  | 1.9 | 80 | 56 | 3,008 | 36,096 |

## General overheads

| Administration expenses | 542 | 6,500 |
| :--- | :---: | :---: |
| Labour | 2,083 | 25,000 |
| Utilities | 650 | 7,800 |
| Rent | 650 | 7,800 |
| Selling \& Distribution Expenses | 217 | 2,600 |
| Depreciation | 83 | 994 |
| Miscellaneous | 208 | 2,500 |
| Subtotals | 4,433 | 53,194 |
| Total operating Costs | 7,441 | 89,290 |

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

| Item | Qty/ <br> day | Qty/yr | $@$ | Prodn/ <br> yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Shoping bags | 600 | 187,200 | 0.5 | 89,290 | 0.6 | 112,320 |

## Profitability Analysis in US\$

| Profitability item | Per day | Per month | Per yr |
| :--- | :---: | :---: | :---: |
| Revenue | 360 | 9,360 | 112,320 |
| Less: Production operating costs | 286 | 7,441 | 89,290 |
| Profit | 74 | 1,919 | 23,031 |

## Sources of Supply of Machinery and Equipment and Raw

## Materials

Blown film extruder, air compressor, pumps, printing machine flexography/rotogravure, bag making machine, and the raw materials used are Printing ink, LD/LLDPE granules and handles. These machines can be imported from China although they can also be got from our local market on Entebbe road.

## Government Facilities and Incentives Available

The manufacturers are allowed to recover their start-up cost to the tune of $25 \%$ of their expenditure in the year of income for four years and initial allowance of $50 \%$ of cost base for eligible property in areas of Kampala, Namanve, Entebbe, Njeru and Jinja while 75\% of cost base of those outside specified areas. Such initial cost is allowed for tax purposes.

## Trade Sector



COTTON MOSQUITO NETS

## Introduction

This profile envisages the establishment of a plant that will manufacture Cotton mosquito nets based on the production capacity of 450 nets per day. Mosquito nets are a natural alternative to toxic chemical sprays as a method of protection against mosquitoes, moths, sand flies and other insects. The $100 \%$ cotton muslin netting provides an enhanced sleeping environment due to its natural fibres and is superior to nylon or polyester mosquito nets. It also allows for a safe and comfortable nights sleep.

## Production Process

The manufacturing process of making mosquito nets goes through cutting the fabric/material according to the required size and design, which is then followed by sewing.

## Equipment:

Sewing machine
Embroidery machine
Zig zag machine
Other accessories

## Capital Investment Requirements

| Capital Investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Sewing machine | No | 3 | 375 | 1,125 |
| Embroidery machine | No | 1 | 129 | 129 |
| Zig zag machine | No | 2 | 172 | 344 |
| Other accessories | No | 1 | 107 | 107 |
| Total |  |  |  | 1,705 |

source: Chinese market

## Production and operation costs

| Cost item | Units | @/ <br> day | Qty/ <br> day | Cost/ <br> day | Cost// <br> month | Cost/ <br> year |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |  |
| Cloth | mtrs | 1.6 | 900 | 1,440 | 37,440 | 449,280 |  |
| Thread | pcs | 0.5 | 3,000 | 1,500 | 39,000 | 468,000 |  |
| Other Materials | pcs | - | - | - | 1,708 | 20,496 |  |
| Subtotal |  | 2 | 3,900 | 2,940 | 78,148 | 937,776 |  |

## General Costs

| Administration expenses | 708 | 8,500 |
| :--- | :---: | :---: |
| Labour | 2,667 | 32,000 |
| Utilities | 650 | 7,800 |
| Rent | 1,000 | 12,000 |
| Selling \& Distribution | 542 | 6,500 |
| Depreciation | 36 | 426 |
| Miscelleneous | 375 | 4,500 |
| Subtotals | 5,977 | 71,726 |
| Total operating Costs | 84,125 | $1,009,502$ |

## Project product costs and Price structure

| Item | Qty/ <br> day | Qty/yr | @ | pdn/yr | UPx | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mosquito nets | 450 | 140,400 | 7.2 | $1,009,502$ | 7.6 | $1,067,040$ |

## Profitability analysis in US \$

| Profitability item | Per day | Per month | Per year |
| :--- | ---: | ---: | ---: |
| Revenue | 3,420 | 88,920 | $1,067,040$ |
| Less: Production operating costs | 3,236 | 84,125 | $1,009,502$ |
| Profit | 184 | 4,795 | 57,538 |

## Sources of Supply of Raw materials

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

## Government Facilities and Incentives Available

The Government has waved off taxes from the mosquito nets, and on top of that investors are allowed to recover startup cost in four years at a rate of $25 \%$. If the factory is located in prescribed areas of Kampala, Entebbe, Jinja, Namanve, Njeru initial costs to the tune of 50\% are allowed while for the rest of areas in Uganda 75\% initial costs are allowed.

## Trade Sector



## SHOE REPAIRING

## Introduction

Shoes are important accessories put on by all categories of people, from babies, children and adults. Sered with. Find a perfect shoe, find out how and what to do when something goes wrong and you need to repair it. This can be a viable venture because nobody wants to move with worn-out, torn, cut, or broken shoes. This project cost US $\$ 1030$ working on about 436800 repairs annually and yielding annual revenues estimated at US $\$ 13104$.

## Process, Capacity and Technology

| Item | Units | Qty | cost | Total |
| :--- | :---: | :---: | :---: | :---: |
| Leather stitching machine | No | 2 | 425 | 850 |
| stitching needles | No | 10 | 3 | 25 |
| foot frames | No | 5 | 5 | 25 |
| Boards | No | 3 | 5 | 15 |
| Shelves and Racks | No | 2 | 15 | 30 |
| Tables | No | 2 | 25 | 50 |
| Other Cutting instruments | No | 10 | 3 | 30 |
| Brushes | No | 4 | 1 | 4 |
| Hammers | No | 4 | 2 | 8 |
| TC of Machinery \& Tools |  |  |  | 1,030 |

The process of repairing shoes is not out straight because depending on the extent of damage on the shoes. These could be broken heels and worn out soles, stitching, faded leather, loose straps or buttons or buckles or fasteners etc.

These determine what to be followed when doing repairs. The capacity 300 shoes per month and the technology involved is locally invented and therefore very affordable.

## Capital Investment Requirement in \$

1. Production costs assumed 312 days per year with daily capacity of 300 repairs
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 costs in US\$

## Direct materials, supplies and costs

| Cost Item | Units | @ | Qty/day | Pdn cost/ <br> day | Pdn cost/ <br> mth | Pdn <br> cost/yr |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct Costs

| Fabric | Mtrs | 3 | 0.96 | 2.88 | 74.88 | 89 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Synthetic | Mtrs | 1.2 | 0.32 | 0.384 | 9.984 | 120 |
| Leather | Mtrs | 7 | 1.28 | 8.96 | 232.96 | 2,796 |
| Threads | Rolls | 10 | 0.2 | 2 | 52 | 625 |
| Nails | kgs | 2.6 | 0.01 | 0.026 | 0.676 | 8.112 |
| Glue | ltrs | 6 | 0.01 | 0.06 | 1.56 | 18.72 |
| Sub-total |  |  |  | 14.31 | 372.06 | $4,465.7$ |

## General Costs (Overheads)

| Labour | 350 | 4,200 |
| :--- | :--- | :--- |
| Selling \& distribution | 50 | 600 |
| Utilities (Water, power) | 35 | 420 |
| Rent | 150 | 1,800 |
| Miscellaneous expenses | 75 | 900 |
| Depreciation | 21.4 | 257.5 |
| Sub-total | 681 | 8,178 |
| Total Operating Costs | 10534 | 12,6434 |

Project product costs and Price structure in US\$

| Item | Qty/day | Qty /yr | @ | Pdn cost/yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Repairs | 1400 | 436,800 | 0.1 | 43,680 | 0.3 | 13,104 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 42 | 1,092 | 13,104 |
| Less: Production and operating costs | 41 | 1053.6 | 12,644 |
| Profit | 1 | 38 | 460 |

## Market Analysis

New Shoes are quite expensive and with our terrain and broken walk ways, shoes get damaged quite often and thus need to repair them. These clinics therefore are often jammed with customers.

## Source of Machinery:

Locally fabricated by Tonet Ltd Kanyanya Gayaza Rd, Tree Shade Ltd, Mwanga II Road Kisenyi Kampala and can also be sourced from China and India. Raw materials are locally available.

## Government Incentives:

U.I.A provides guidelines on investment, government incentives, taxes and security matters.

## Trade Sector



## 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 1404000 boxes per year bringing estimated revenue of US\$ 82240 annually having invested US\$ 6340

## Government Incentive

Initial allowance $70 \%$ granted on actual cost base of plant and machinery for industries located elsewhere in Uganda.

## Market

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.

## Capital Investment Requirement in US\$

| Item | Units | Qty | Price | Total |
| :--- | :---: | :---: | :---: | :---: |
| Powder blending machine | No | 1 | 1000 | 1000 |
| Crushing \& Kneading machine | No | 1 | 1700 | 1700 |
| Extrusion Machine vessel with <br> stirrer | No | 2 | 900 | 1800 |
| Cutting Machine with blower | No | 2 | 850 | 1700 |
| Rota stamping Machine | No | 1 | 40 | 40 |
| Tube filling machine | No | 1 | 100 | 100 |
| TC of tools |  |  |  | 6340 |

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.
. Direct costs include: materials, supplies and all other costs incurred to produce the product.
3. A production month is 26 work days
4. Currency used is US Dollars.

## Production and Operating Costs in US \$

Cost Item $\quad$ Units $\quad$ @ \begin{tabular}{c}
Qty/ <br>
day

$\quad$

Pdn <br>
cost/day

$\quad$

Pdn cost/ <br>
mth

$\quad$

Pdn cost/ <br>
yr
\end{tabular}

## Direct Costs

| Pyrethrum | Kgms | 2 | 3 | 6 | 156 | 1,872 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Deodar <br> sawdust | Itrs | 2.2 | 0.2 | 0.44 | 11.4 | 137.28 |
| Maida wood <br> bark | Itrs | 1.3 | 0.13 | 0.169 | 4.3 | 52.72 |
| pyrethrum <br> oleoresin | Pkts | 1.5 | 31 | 46.5 | 1,209 | 14,508 |
| Citronella oil | Itres | 2.4 | 0.32 | 0.768 | 20.1 | 240 |
| Benzoic acid | Itres | 90 | 0.16 | 14.4 | 374 | 4,493 |
| Packaging <br> boxes | kgs | 3.6 | 3 | 10.8 | 281 | 3,370 |
| Other <br> materials / <br> chemicals | Ltrs | 45 | 1 | 45 | 1,170 | 14,040 |
| Sub-total | - | - | - | 124 | $3,226.00$ | $38,712.02$ |

General Costs (Overheads)

| 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 | 132.08 | 1,585 |
| Sub-total | 3,132 | 37,585 |
| Total Operating Costs | 6,358 | 76,297 |

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

| Item | Qty / <br> day | Qty /yr | @ | Pdn cost/ <br> yr(\$) | UPx | TR(\$) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Mosquito <br> Coils | 4,500 | $1,404,000$ | 0.2 | 280,800 | 0.3 | 84,240 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 270 | 7,020 | 84,240 |
| Less: Production and operating <br> costs | 244.5 | 6,358 | 76,297 |
| Profit | 25.5 | 662 | 7,943 |

## 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. Kenya and the local market will provide raw materials.

## Trade Sector



## 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-toweight ratio, good dimensional stability, good thermo-formability, etc. it costs US\$ 15950 with a capacity 31200 kg annually and estimated revenues are US\$ 433056 per annum

## Production process

In manufacturing process, a mixture of regenerated and virgin methyl methacrylate monomer is used to affect economy of operation. To obtain the regenerated polymer, the acrylic scrap is heated with certain chemicals to about $4000-4500 \mathrm{C}$ 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 polymetyl 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.

## Capital Investment Requirement in US \$

| Item | Units | Qty | Price | Total |
| :--- | :---: | :---: | :---: | :---: |
| Acrylic scrap depolmerization <br> unit | No | 1 | 2,000 | 2,000 |
| SS distillation still | No | 2 | 1,000 | 2,000 |
| Coal fired boiler | No | 2 | 3,200 | 6,400 |
| Water storage tanks | No | 2 | 550 | 1100 |
| Glass sheet moulds | No | 1 | 2,000 | 2,000 |
| Acrylic sheet cutter machine | No | 1 | 1250 | 1250 |
| Water circulation pumps | No | 4 | 300 | 1,200 |
| TC of Machinery \& Tools |  |  |  | 15,950 |

## Production and Operating costs in US \$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> yr |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct Costs

| Acrylic scrap | kgs | 70 | 3.21 | 225 | 5842 | 70,106 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Methyl methacrylate <br> monomer | Itrs | 45 | 0.16 | 7.2 | 187.2 | 2,246 |
| Benzyl peroxide | Itrs | 37 | 0.1 | 3.7 | 96.2 | 1154.4 |
| calcium chloride | kgs | 20 | 0.96 | 19.2 | 499.2 | 5,990 |
| Pearl essence\& Colour | Itrs | 7 | 0.22 | 1.54 | 40.04 | 480.48 |
| Stearic acid | Itrs | 70 | 0.31 | 21.7 | 564.2 | 141 |
| Packaging material | pkts | 4 | 3.21 | 12.8 | 334 | 4,006 |
| Sub-total |  |  |  | 293 | 7,607 | 84,652 |

General Costs (Overheads)

| 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 | 332.33 | 3,988 |
| Sub-total | 2,782 | 33,388 |
| Total Operating Costs | $10,388.8$ | 118,040 |

Project product costs and Price Structure in US \$

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Pdn <br> cost/yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acrylic Sheets | 100 | 31,200 | 3.47 | 108,264 | 4 | 433,056 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 1388 | 36,088 | 433,056 |
| Less: Production and operating <br> costs | 378.33 | 9,837 | 118,040 |
| Profit | 1009.7 | 26,251 | 315,016 |

## Source of Equipment

It can be locally made by Tonet Ltd, Kanyanya, Gayaza Rd or imported.

## Trade Sector



## MAKING RUBBER BALLONS

## Introduction

The proposed Business Idea is to set up a plant for making and marketing of rubber balloons. Balloons are colorful rubber items produced in different sizes, patterns, designs, and shapes. Rubber balloons are play materials for children of all age groups and are also used for decorative purposes. They can be marketed through retail outlets, Stationary Shops, Fancy Stores and Gift Shops. This business idea is premised on production of 46800 kgs per month which translates into 3900 kgs per annum. The revenue potential is estimated at US $\$ 120058$ per month translating into US $\$ 1,440,698$ per annum with a sales margin of $5 \%$ and a total investment requirement is US\$ 9856 for the first year of project operation.

## Production Process

The latex is prepared, compounded, dipped and the film is dried and beading made with the help of moulds, through dipping and vulcanizing, the latex is stripped off, which gives the finished product; whereby a packet of 100 units of rubber balloons in different colours and sizes is ready for dispatch

## Capital investment requirement in us\$

| Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| De-ammoniating Vessel | No | 1 | 400 | 400 |
| Pot mill | No | 1 | 250 | 275 |
| Paddle Mixer | No | 1 | 250 | 250 |
| Dipping ace | No | 2 | 350 | 700 |
| Packing Machine | No | 1 | 600 | 600 |
| Weighing Balance | No | 1 | 150 | 150 |
| Delivery Van | No | 1 | 8000 | 8,000 |
| Total |  |  |  | 10,375 |

## Operating cost in us \$

| Cost Item | Units | @ | Qty/ <br> day | cost/ <br> day | cost/ <br> month | cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Latex | kg | 1.5 | 1,000 | 1,500 | 39,000 | 468,000 |
| Chemicals and dyes | kg | 2 | 200 | 400 | 80,000 | 960,000 |
| Packing Materials | No | 1.2 | 10 | 12 | 312 | 3,744 |
| Sub-total |  |  | 1,210 | 1,912 | 119,312 | $1,431,744$ |

## General Operating Costs (Overheads)

| Rent | 50 | 600 |
| :--- | :---: | :---: |
| Labour | 180 | 2,160 |
| Utilities(Power) | 100 | 1,200 |
| Preliminary costs | 100 | 1,200 |
| Miscellaneous Costs | 100 | 1,200 |
| Depreciation(Asset write off)Exp | 216.16 | 2,594 |
| Sub-total | 746.16 | 8,954 |
| Total Operating Costs | 120,058 | $1,440,698$ |

1,000 Kilograms of Rubber Balloons and it is assumed that each kilogram contains 50 Rubber balloons and each balloon is sold at US $\$ 0.035$ on the wholesale market Depreciation (fixed asset write off) assumes _4_ years life of assets written off at _25\% per year for all assets.
Direct Costs include: materials, supplies and other costs that directly go into production of the product.A production month is assumed to have 26 days.

## Project cost and Price structure

| Item | Qty/ <br> day | Qty/Yr | @ | Pdn cost/Yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balloons | 1,800 | 561,600 | 1.5 | 842,400 | 1.75 | $1,474,200$ |

## Profitability analysis table

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 4,725 | 122,850 | $1,474,200$ |
| Less: Production and Operating <br> Costs | 4,618 | 120,058 | $1,440,698$ |
| Profit | 107 | 2,792 | 33,502 |

## Market Analysis

Rubber balloons have a steady demand in the market since they are used in all occasions especially for decorations.

## Source of Raw Materials and Equipments

Raw materials (Latex Rubber) can be imported from countries like Ghana and Liberia while equipment can be imported from India and China.

## Government Incentives Available.

Government is encouraging small scale businesses and income generating activities to eradicate poverty through financial institutions which provide soft loans to the investors. Organizations like Private Sector Foundation Uganda are channels through which subsidies and free advisory services are given.

## Trade Sector



MAKING SPINDLE TAPES

## Introduction

Spindle tapes are mainly used in textile industries where spindles do run at a very high speed with minimum vibrations. Perfect spindle tapes are ideal for cotton, woolen, worsted \& synthetic fiber spinning.

The Project cost is US\$42,006 bringing revenue estimates of US $\$ 139,994$ from production capacity of 700128 rolls annually.

These tapes exhibit, Permanent anti static behavior, are energy saving, high resistance to abrasion and easy to join. With increased focus on increasing local textile output, and the advent of institutions like Nytile and phoenix textiles plus the successful accessing of foreign markets especially through new trade policies, the demand for spindle tapes is also increasing.

## Production process, capacity, technology

The main production process consists of yarn preparation, and weaving. Yarn, nylon or cotton obtained in the form of cones from spinning mills is transferred into weaver's beam using the warping machine and bobbins using the pin winding machine. The beaver's beam is mounted on the multi- station power loom which constitutes warp.

Bobbins are fed into the power loom through shuttles and this constitutes weft. Tape is woven by the interlacing of weft and warp. This is done mechanically by the power loom. After the tape is made, it is inspected, measured and rolled by the automatic tape rolling machine. The plant at the start of production has a minimum output of 700,000 meters each year. This is equal to 14,000 rolls each of 50 meters length, and working 26 days in a month

## Capital Investment Requirement in US \$

| Item | Qty | Price | Total |
| :--- | :---: | :---: | :---: |
| Sectional warping machine | 1 | 4,500 | 4,500 |
| Pirn winding machines | 1 | 3,200 | 3,200 |
| Multi-station power loom | 2 | 4,900 | 9,800 |
| Automatic tape rolling machine | 1 | 3,200 | 3,200 |
| TC of tools |  |  | 20,700 |

Production and Operation costs in US \$

| Cost <br> Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> cost/day | Pdn cost// <br> mth | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs <br> Cotton <br> Yarn <br> Mtrs 0.21 |  |  |  |  |  |  |
| Nylon Yarn | Mtrs | 0.6 | 25.6 | 4 | 15 | 400 |
| Chemicals | Ltrs | 45 | 0.16 | 7.2 | 187 | 2,800 |
| Sub-total |  |  |  | 26.6 | 692 | 8,306 |

## General Costs (Overheads)

| Labour | 1,000 | 12,000 |
| :--- | :---: | :---: |
| Selling \& distribution | 200 | 2,400 |
| Utilities (Water, power) | 200 | 2,400 |
| Administration Expenses | 400 | 4,800 |
| Rent | 500 | 6,000 |
| Miscellaneous expenses | 100 | 1,200 |


| Depreciation | 431 | 5,175 |
| :--- | :---: | :---: |
| Sub-total | 2,831 | 33,975 |
| Total Operating Costs | 3,523 | 42,006 |

Project product cost and Price Structure in US\$

| Item | Qty/day | Qty/yr | Unit cost | Pdn cost/yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Spindles | 2,244 | 699,972 | 0.1 | 38,700 | 0.2 | 139,994 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 449 | 11,666 | 139,994 |
| Less: Production and operating <br> costs | 134 | 3,501 | 42,006 |
| Profit | 314 | 8,166 | 97,988 |

## Market

Spindle tapes have great market in the textile sector. Therefore, supply should be made to those industries, which deal in textile production. Potential for export exists in the long run especially with the advent of the AGOA act which promotes the export of textile materials to the USA. However, with the growth of the local textile industry, there is market locally for the tapes.

## Source of machinery and Raw materials

All the machinery can only be imported while materials to be used can be got locally but also some can be imported.

## Government intervention

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

## Trade Sector



REXENE WORKS (BICYCLE CARRIER SEATS)

## Introduction

This business idea is for the production and marketing of Rexene products, Rexene finds a wide application ranging from being used as seat covers to covering material. Rexene works include: bicycle carrier seats that are used in transportation of people. As Rexene products are cost effective, flexible and long lasting, there is a good demand for Rexene products that is untapped. The production capacity is estimated at 140 seats per day, total operating costs are estimated at US\$ 142,827 per year and revenue estimates at US\$ 213988 per year.

## Production Process

After creating patterns, Rexene is put along with a suitable cloth lining stitched along with the needed fittings like, sisal roll plywood sponge and glue etc. The Rexene material can also be used for making two-wheeler seats covers, using the same machines.

## Capital Investment Requirements in US\$

| Capital investment item | Qty | @ | Amount |
| :--- | :---: | :---: | :---: |
| Sewing machine with 1/4 horse power | 3 | 1,850 | 5,550 |
| Other tools |  | 1,000 | 1,000 |
| TCs on Equipments |  |  | 6,550 |

## Production and operating Costs in US $\$$

| Cost Item | Units | $@ /$ <br> day | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sponge (21/2x6) | fts | 1.05 | 60 | 63 | 1638 | 19,656 |
| Sisal | Rolls | 3 | 2 | 6 | 156 | 1872 |
| Glue | Ltrs | 5.2 | 3 | 15.6 | 405.6 | 4,867 |
| Threads | sets | 2.15 | 2 | 4.3 | 111.8 | 1,342 |
| Plywood | Mtrs | 11.5 | 30 | 345 | 8,970 | 107,640 |
| Sub-total |  |  | 97 | 433.9 | 11,281 | 135,377 |


| Utilities (water and power) | 50 | 600 |
| :--- | :---: | :---: |
| Labour | 250 | 3,000 |
| Rent | 100 | 1,200 |
| Miscellaneous costs | 50 | 600 |
| Administration costs | 25 | 300 |
| Depreciation (Asset write off)Expenses) | 136.5 | 1,638 |
| Sub -total | 621 | 7,450 |
| Total Operating Costs | 11,902 | 142,827 |

Production costs assumed are for 312 days per year with a daily capacity of 150 bicycle carrier seats
Depreciation (fixed assets write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets
Direct costs include: materials, supplies and other costs that directly go int production of the product

Project product cost nd Price structurein US

| Item | Qty/ <br> day | Qty/yr | @ | Pdn cost <br> /yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bicycle carrier <br> seats | 140 | 43,680 | 2.13 | 93,038 | 2.3 | 213,988 |

## Profitability analysis in US \$

| Profitability Item | Per day | Per <br> month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 685.85 | 17,832 | 213,988 |
| Less production and operating Costs | 457.7 | 11,902 | 142,827 |
| Profit | 19 | 484 | 5,810 |

## Market Analysis

A relatively low cost process, products made out of rexene have tremendous market potential. Preferred by many, Rexene products have high demand.

## Sources of Raw Materials and Equipments

Raw materials are available in markets and equipment can be sourced from China North Machine (U) co.ltd. Plot 24 Jinja Rd opp. Bank of Africa.

## Government Facilities and Incentive Available

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 a liberalized market.

## Trade Sector



## SYNTHETIC GEM CUTTING AND POLISHING

## Introduction

This business idea is for cutting and polishing synthetic gem. . Synthetic gems are widely used in preparation of imitation jewelry and also in decorative jewelry, fancy articles, mirrors, slip-ons, ready-made garments and bitenge. The business idea aims at production of 5,000 units per month which translates into 60,000 units annually. The revenue potential is estimated at \$US 10,055 per month, translating into $\$ 120,660$ per year with a sales margin of $15 \%$. The total capital investment for the project is $\$ 6,860$.

## Technology and Production Process

The Tools and Equipments used include: a slicing machine, a performing machine, faceting machine, tools and other items and office furniture. The raw materials are cutting plates and synthetic gems.

The rough gem crystal is cut on a thin steel plate and is fed with real diamond dust mixed with water. The work done in cutting the rough gem crystal gives deep horizontal and vertical cuts on the rough gem which are chiseled and hammered out to get a fine gem.

Due to its fragile nature, it breaks into rough coned pieces. The rough pieces are mounted with a pitch and shell on the edge of bamboo stick, which is pressed against rough carborundum wheels Finally, proper facing and polishing of rough-cut pieces is done by using grinding lap made of gun metal, copper, lead, etc.

Capital Investment Requirements

| Capital Investment item | Qty | @ | Amount |
| :--- | :---: | :---: | :---: |
| Slicing machine | 1 | 1,280 | 1,280 |
| Performance machine | 1 | 700 | 700 |
| Faceting machine | 1 | 3,380 | 3,380 |
| Office Furniture | 4 | 800 | 3,200 |
| Others | 1 | 500 | 500 |
| Total |  |  | 9,060 |

## Production and operation costs in us \$

## Direct materials, supplies and costs

| Cost item | Units | @/ <br> day | Qty/ <br> day | Cost/ <br> day | Cost/ <br> month | Cost/ <br> yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs Cutting <br> plate | pcs | 12 | 19 | 228 | 5,928 | 71,136 |
| Synthetic Gems | pcs | 10 | 19 | 190 | 4,940 | 59,280 |
| Other Materials | pcs | - | - | 0 | 1,708 | 20,496 |
| Subtotal |  | 22 | 38 | 418 | 12,576 | 150,912 |

## General Costs

| Admin.expenses | 500 | 6,000 |
| :--- | :---: | :---: |
| Labour | 2,500 | 30,000 |
| Utilities | 650 | 7,800 |
| Rent | 1,000 | 12,000 |
| Selling \& Distribution | 542 | 6,500 |
| Depreciation | 189 | 2,265 |
| Miscelleneous | 375 | 4,500 |
| Subtotals | 5,755 | 69,065 |
| Total operating Costs | 18,331 | 219,977 |

## Projected Monthly Revenue

Project product costs and Price structure in US\$

| Item | Qty/ <br> day | Qty/yr | @ | Prodn/ <br> year | UPx | Revenue |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Jewerly <br> Rings | 150 | 46800 | 4.7 | 219,977 | 5.5 | 257,400 |

## Market Analysis

Synthetic gems are widely used in preparation of imitation jewelry, decorative/fancy articles, mirrors, slip-on and ready-made garments. Apart from domestic market, synthetic gems can also be exported.

Sources of Supply of Equipments and Raw Materials The equipments and raw materials can be imported.

## Trade Sector

## MAKING CLEANING POWDER

## Introduction

This business idea is for making cleaning powder. The cleaning powder, manufactured in different qualities and grades, is mainly used for cleaning stainless steel utensils, glassware, ceramic ware and flooring etc. In addition to households, the bulk users of cleaning powders are hotels, canteens and commercial organizations.

The business idea aims at production of $15,600 \mathrm{kgs}$ of cleaning powder annually. The revenue potential is estimated at US\$ 255,840 per year with a net profit margin of $19 \%$ and a payback period of 4 months. The total capital investment for the project is US $\$ 9,250$.

## Production Process

Soda ash and acid slurry are mixed in required proportion and eft for an hour. Subsequently, this is mixed with calcite powder, fragrance and grounded to fine powder and packed for marketing.

## Scale of Investment

Capital Investment Requirements

| Capital Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Ribbon blending machine | No | 1 | 7,500 | 7,500 |
| Weighing balance | No | 1 | 500 | 500 |
| Sealing machine | No | 1 | 300 | 300 |
| Bag Sealing machine | No | 1 | 500 | 500 |
| Containers | No | 10 | 45 | 450 |
| Total |  |  |  | 9,250 |

## Production and Operation costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn Cost/ <br> day | Pdn Cost/ <br> mth | Pdn <br> Cost/yr1 |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |

## Direct costs3:

| Dolomite | Kgs | 0.49 | 50 | 24.5 | 637 | 7644 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Acid slurry | Litres | 1.89 | 10 | 12 | 309 | 3709 |
| Soda Ash | Kgs | 1.27 | 10 | 12.7 | 330.2 | 3962.4 |
| Tri-sodium <br> phosphate | Kgs | 55 | 10 | 550 | 14300 | 171600 |
| Sub-total |  |  |  |  | 15,576 | 186,916 |

## General costs (Overheads)

| Labour | 500 | 6,000 |
| :--- | :---: | :---: |
| Utilities | 400 | 4,800 |
| Selling and Distribution | 200 | 2,400 |
| Administrative expenses | 150 | 1,800 |
| Shelter | 300 | 3,600 |
| Depreciation Expenses | 193 | 2,313 |
| Sub-total | 1743 | 20,913 |
| Total Operating Costs | 17,319 | 207,829 |

Production is assumed for 312 days per year.
Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
A production Month is assumed to have 26 days.

## Project Product costs and Price Structure in US

| Item | Qty/ <br> day | Qty/yr | @ | Pdn/yr | UPx | Total <br> revenue |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cleaning powder | 50 | 15,600 | 13.32 | 207,829 | 16.4 | 255,840 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 820 | 21,320 | 255,840 |
| Less: Production and Operating <br> Costs | 666 | 17,319 | 207,829 |
| Profit | 154 | 4,001 | 48,011 |

## Sources of Supply of Equipments

All equipments can be obtained in Uganda.

## Trade Sector

## MAKING TOOTHPOWDER

## Introduction

This business idea is for the production and marketing of toothpowder. Tooth powder is healthy for teeth and gums and will leave your mouth feeling super clean and your breath smelling good. Toothpaste simply adds binder agents and water, turning the powder into a paste that has a cleaner feeling and more easily coats the teeth. The TR is estimated at US $\$ 62,400$ per year with a net profit of $51 \%$ and a payback period of 2 years and 5 months. The total investment cost of US $\$ 15,555$ per year.

## Production Process

Combine three tablespoons of baking soda, one tablespoon salt, and four drops of clove oil in glass or metal bowl. Use a spoon to mix well, mashing mixture against the sides of the bowl to ensure that oil is well distributed. To use powder, place a teaspoonful in the palm of your hand and pick up with a moistened toothbrush and Store powder in small, air-tight jar.

## Capital investment requirements USD

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Distillation unit | no | 1 | 620 | 620 |
| Toothpaste filling machine | no | 1 | 1,275 | 1275 |
| Baby boiler | no | 1 | 2,295 | 2295 |
| Grinder | no | 1 | 120 | 120 |
| Crimping machine with hand <br> operated | no | 1 | 945 | 945 |
| Van | no | 1 | 9,000 | 9000 |
| Drier | no | 1 | 1,300 | 1300 |
| Total cost on machinery |  |  |  | 15,555 |

## Production and Operating Costs

Direct Materials, Supplies and Costs

| Cost Item | Units | $@ /$ <br> day | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Baking soda | kg | 1.5 | 5 | 7.5 | 195 | 2,340 |
| Table salt | kg | 0.8 | 2 | 1.6 | 41.6 | 499 |
| Clove oil | Itrs | 2.5 | 3 | 7.5 | 195 | 2,340 |
| Sub-total |  |  | 10 | 16.6 | 431.6 | 5,179 |

## General costs(overheads)

| Utilities(water and power) | 150 | 1,800 |
| :--- | :---: | :---: |
| Labour | 813 | 9,756 |
| Rent | 150 | 1,800 |
| Miscellaneous costs | 50 | 600 |
| Distribution costs | 650 | 7,800 |
| Depreciation (Asset write off) Expenses | 324 | 3,889 |
| Sub -total | 2,137 | 25,645 |
| Total Operating Costs | 2,569 | 30,824 |

Production costs assumed 312 days per year with a daily capacity of 500 tins of tooth powder.
Depreciation (fixed assets write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets
Direct costs include materials, supplies and other costs that directly go into production of the product.

## Project product Cost and Price Structure

| Item | Qty / <br> day | Qty /yr | @ | Pdn / <br> yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tooth powder | 500 | 156,000 | 0.2 | 30,824 | 0.4 | 62,400 |

Profitably Analysis in US\$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 200 | 5,200 | 62,400 |
| Less production \& operating <br> Costs | 99 | 2,569 | 30,824 |
| Profit | 101 | 2,631 | 31,576 |

## Market Analysis

Tooth powder is used in our daily life irrespective of age group. Dental care awareness is increasing all the people's demand for the paste and powder including the rural masses. As a result, it has a good growing market. It can be supplied to supermarket chains, retail/grocery shops and clinics. This product is stocked almost in all shops throughout the country.

## Source of Raw Materials and Equipment

Raw materials and equipments are locally available on market

## Government Facilities and Incentives

Government is encouraging small scale businesses and income generating activities to eradicate poverty and create employment

## Trade Sector



## Production Capacity, Technology \& Process

The production process involves winding yarn and then knitted in different fashions as the operator desires. The product is combined together by a sewing machine and then packed.

The production capacity largely depends on the nature of the machines used, the efficiency and experience of the workers, and the desired objectives of the project.

Capital Requirements and Equipment
Capital Investment Requirements in US \$

| Capital investment item | units | Qty | $@$ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Knitting machine | No | 2 | 7,000 | 14,000 |
| Sewing machine | No | 2 | 500 | 1,000 |
| Furniture | No | - | - | 2,500 |
| Scissors | No | 10 | 15 | 150 |
| Measuring tapes | No | 12 | 7 | 84 |
| Steam Iron | No | 2 | 50 | 100 |
| Other Equipment | No | - | - | 1,000 |
| Total |  |  |  | 18,834 |

## Production and Operating Costs in US\$

## KNITTING OF WOOLEN KNITWEAR

## Introduction

Woolen knitted products are highly demanded. The business idea is aimed at establishing a woolen kitting project with a capital investment cost of US\$ 18,834, producing an average of 60 woolen knitwear products per day totaling to US $\$ 18,720$ pieces fetching a revenue of US $\$ 121,680$ when sold in the first year of operation. The operating costs are US\$ 104,342.

## Direct Materials, Supplies and Costs

Cost Item $\quad$ Units $\quad$ @ \begin{tabular}{c}
Qty/ <br>
day

 

Pdn <br>
cost/ <br>
day

$\quad$

Pdn <br>
cost/ <br>
mth

$\quad$

Pdn <br>
cost/ <br>
yr
\end{tabular}

## Direct Costs

| Rolls of yarn | Rolls | 0.75 | 254 | 190.5 | 4,953 | 59,436 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Rolls of threads | Rolls | 0.5 | 35 | 17.5 | 455 | 5,460 |
| Packaging <br> materials | Pcs | 0.08 | 64 | 5.12 | 133 | 1,597 |
| Sub-total |  |  | 353 | 213.1 | 5,541 | 66,493 |

General Costs(Overheads)

| Labor | 954 | 11,450 |
| :--- | :---: | :---: |
| Utilities | 346 | 4,150 |
| Selling and distribution | 187 | 2,240 |
| Miscellaneous expenses | 88 | 1,050 |
| Administration expenses | 188 | 2,250 |
| Rent | 1,000 | 12,000 |
| Depreciation | 2763 | 4,709 |
| Sub-total | 3,143 | 37,849 |
| Total Operating Costs | 8,684 | 104,342 |

1. Production costs assumed are for 312 days per year with daily capacity of knitting 60 pieces of woolen knitwear
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. Total monthly days assumed are 26 -work days.
5. The valuation currency used is United States Dollars

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn cost/ <br> yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Woolen <br> Knitwear | 60 | 18,720 | 5.6 | 104,342 | 6.5 | 121,680 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 390 | 10,140 | 121,680 |
| Less: Pdn \&Operating Costs | 334 | 8,695 | 104,342 |
| Profit | 56 | 1,445 | 17,338 |

## Trade Sector



DECORATION OF GLASS WARES

## Introduction

This project is for manufacturing and marketing decorated glassware. In order to upgrade the quality of the daily-use glassware items like tea sets, dinner sets, and lampshades different designs are put on the glassware to make it more attractive. They have a wide market because they are household items in almost every family in both rural and urban areas.

They are used in places like hotels, offices, Restaurants, and homes. The business idea is based on production of 26,000 decorated glasses per month, which translates into 312,000 glasses per annum.

The revenue potential is estimated at US $\$ 14,300$ per month, translating into US $\$ 171,600$ per annum with a net profit margin of $23 \%$ and a payback period of 1 year and 4 months. Total investment requirements are US $\$ 24,110$ for the first one year of project operation.

Production process-The glassware is decorated with the help of special attractive designs are painted or printed.. In making multicoloured designs, different types of silk screens are prepared after mixing colours with turpentine fat oil or gum. After painting on a clean surface, the glassware is allowed to dry and put in an electric muffle furnace and heated at a temperature of $500^{\circ} \mathrm{C}-550^{\circ} \mathrm{C}$

## Capital Investment Requirements in US\$

| Item | Unit | Qty | Cost | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Silk Screen- Printing machine | No | 1 | 1,100 | 1,100 |
| Electronic Muffle furnace | No | 1 | 13,000 | 13,000 |
| Painter's wheels | No | 2 | 230 | 460 |
| Paint brushes, dishes, basins, <br> buckets etc | No | 20 | 2 | 40 |
| Office Equipments | No |  | 510 | 510 |
| Delivery Van | No | 1 | 9,000 | 9,000 |
| Total |  |  |  | 24,110 |

Production and Operating Costs in US\$

## Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct costs

| Ceramic ware | No | 0.2 | 1,000 | 200 | 5,200 | 62,400 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Ceramic colours | liters | 1 | 50 | 50 | 1,300 | 15,600 |
| Luster | liters | 2.5 | 25 | 62.5 | 1,625 | 19,500 |
| Screen printing <br> materials | No | 3 | 5 | 15 | 390 | 4,680 |
| Packing Materials | No | 0.027 | 1,000 | 27 | 702 | 8,424 |
| Sub-total |  |  | 2,080 | 355 | 9,217 | 110,604 |

## General Costs (Overheads)

| Rent | 250 | 3,000 |
| :--- | :---: | :---: |
| Labour | 750 | 9,000 |
| Utilities (Water \& power) | 100 | 1,200 |
| Preliminary costs | 100 | 1,200 |
| Miscellaneous costs | 100 | 1,200 |
| Depreciation (Asset write off)Exp | 492 | 5,900 |
| Sub-total | 1,792 | 21,500 |
| Total Operating Costs | 11,009 | 132,104 |

1. Production and Operating Costs in US\$
2. Production costs assumed are for 312 days per year with a daily capacity of 1,000 decorated glass wares
3. Depreciation (fixed asset write off) assumes _4_years life of assets written off at _25\% per year for all assets.
4. Direct Costs include: materials, supplies and other costs that directly go into production of the product
5. A production month is assumed to have 26 days.

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/Yr | @ | Pdn <br> cost/Yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Decorated Glass <br> wares | 1,000 | 312,000 | 0.4 | 132,104 | 0.55 | 171,600 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 550 | 14,300 | 171,600 |
| Operating Costs | 423 | 11,009 | 132,104 |
| Profit | 127 | 3291 | 39,496 |

## Trade Sector



## MAKING BRASS WARE (FLOWER VASES)

## Introduction

Flower vases are used in offices, homes, churches, hotels restaurants and reception halls. Vases can be made from a number of materials including cement, ceramics and glass.

The business idea is for the production and marketing of flower vases. The production capacity is estimated at producing flower vases 80 per day with the total investment estimated at a cost of US $\$ 368$. the TR estimated at a cost of US $\$ 589,056$ per year, with a net profit of $10 \%$.

## Capital Investment Requirements in US $\$$

| Capital investment item | Unit | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Buckets | No. | 20 | 4.8 | 96 |
| Molds | No. | 15 | 2.1 | 31.5 |
| Working tables | No. | 4 | 40 | 160 |
| Jeri cans | No. | 10 | 8 | 80 |
| TC on machinery |  |  |  | 368 |

## Production Process

Cement is mixed into large empty buckets, clay and water are added and mixed together and the mix should not be thick. Painting oil is taken and rubbed into the mold, making sure that you cover the entire inside of the mold; this will make it a lot easier to remove the cement from the mold. The next step is to add cement to the mold, only filling it half way. Spread evenly into the mold, and then place the small flower pot directly in the middle of the mold bucket; this will help to set the shape of the flower pot. Then allow your mold to dry. This will probably take several hours. It will help if you can set the mold in the sun to allow it to harden.

Once the cement is hard you can them remove it from the mold. Make sure that it is completely dry before you remove it. Then paint the pot afterwards; two coats of paint are more desirable, allow the first coat to dry then add the second coat. Once the paint is dry you can then add your dirt and start planting your flowers.

## Production and Operating costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost / <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cement | Kg | 10.6 | 100 | 1,060 | 27,559 | 330,720 |
| Paint | Itrs | 18 | 20 | 360 | 9,360 | 112,320 |
| Oil | Itrs | 1 | 8 | 8 | 208 | 2,496 |
| Clay | Tones | 80 | 3 | 240 | 6,240 | 74,880 |
| Sub-total |  |  |  |  | 43,368 | 520,416 |

## General costs(overheads)

| Utilities(water and power) | 100 | 1,200 |
| :--- | :---: | :---: |
| Labour | 250 | 3,000 |
| Rent | 175 | 2,100 |
| Miscellaneous costs | 250 | 3,000 |
| Administration costs | 100 | 1,200 |
| Depreciation(Asset write off)Expenses) | 8 | 92 |
| Sub -total | 883 | 10,592 |
| Total Operating Costs | 44,251 | 531,008 |

1. Production costs assumed 312 days per year with a daily capacity of 80 flower vase.
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 production

Project product Costs and Price Structure

| Item | Qty/ <br> day | Qty / <br> yr | @ | Pdn cost <br> $/ \mathrm{yr}$ | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Flower vases | 80 | 24,960 | 21.3 | 531,008 | 23.6 | 589,056 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per mnth | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,888 | 49,088 | 589,056 |
| Less production and operating Costs | 1,702 | 44,251 | 531,008 |
| Profit | 186 | 4,837 | 58,048 |

## Sources of Raw Materials:

Raw materials are locally available.

## Government Facilities and Incentives

The Government subsidies in form of Tax exemptions \& Grants are available for the informal sector

## Trade Sector



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 Process

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

| - |
| :--- |
| - |
| Crepare raw materials and monomers |
| - Polymerization reactions |
| - 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 tonnes per month.

## Tools and Equipment in US \$

| - Heater/Melting Machine | - Injection machine |
| :--- | :--- |
| - Molding machine | - Weighing balance |
| - Plastics crushing machine | - Raw Materials |
| - Recycled plastics |  |
| - Ethylene and propylene come from crude oil |  |
| - Plasticizers, dyes and flame-retardant chemicals |  |

## 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.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Truck | No. | 1 | 12,000 | 12,000 |
| Injection Machine | No. | 1 | 3,100 | 3,100 |
| Molding Machine | No. | 1 | 5,250 | 5,250 |
| Plastic Melting Machine |  | 1 | 1,250 | 1,250 |
|  | No. |  |  |  |
| Weighing Scale | No. | 1 | 110 | 110 |
| Furniture | No. | 3 | 33 | 99 |
| Total Amount |  |  |  | 21,809 |

## Operating Costs in US\$

| Item | Units | @ \$ | Qty/ <br> day | Prod. <br> Cost/ <br> day $\$$ | Prod. <br> Cost/ <br> mth\$ | Prod. <br> Cost/ <br> Year[1]\$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Ethylene Oxide | Litres | 6 | 100 | 600 | 15,600 | 187,200 |
| Compounded Plastics | Kgs | 0.6 | 1,000 | 650 | 16,900 | 202,800 |
| Sub total |  |  |  |  | 32,500 | 390,000 |

## General Costs (Over heads)

| 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 | 454 | 5,452 |
| Sub - total | 3,554 | 42,652 |
| Total Operating Costs | 36,054 | 432,652 |

## Project Product Costs \& Price Structure

| Item | Qty/day-ton | Qty/ <br> yr | @\$ | Pdn Cost/ <br> yr\$ | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Caps | 1 | 312 | 1,387 | 432,652 | 1,600 | 499,200 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,600 | 41,600 | 499,200 |
|  <br> Operating Costs | 1387 | 36,054 |  |
|  |  |  | 432,652 |
| Profit | 213 | 5,546 | 66,548 |

## 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.

## Trade Sector



## MAKING BATHROOM SANDALS

## Introduction

This venture is for making of Bathroom sandals. Their market structure is wide because they are used by all people in the society Their demand prospect is high due to the continuous increase in income of people and improved life styles.

## Production Capacity

The business idea is premised on production of 12,012 pairs of sandals per month which translates into 144,144 pairs per year. The revenue potential is estimated at US\$278,198per year , with a net profit margin of $34 \%$ and a payback period of 4 months. This project Investment is US $\$ 11,638$.

## Process Description:

The process involves cutting cellular rubber sheets into required shapes \& sizes and ready-made straps are fixed to the cut rubber sheets depending on the size and colour.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | Amount |
| :--- | :--- | :--- | :--- | :--- |
| Hydraulic cutting machine | No | 1 | 2,800 | 2,800 |
| Drilling Machine | No | 1 | 500 | 500 |
| Smoother Machine | No | 1 | 230 | 230 |
| Drilling bits for straps, cutting <br> tools | No | 6 | 18 | 108 |
| Delivery van | No | 1 | 8,000 | 8,000 |
| Total |  |  |  | 11,638 |

Production and Operating Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost// <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Hawai Rubber <br> Cellules | No | 10.9 | 8 | 87 | 2,267 | 27,206 |
| Straps | pairs | 0.96 | 462 | 444 | 11,532 | 138,378 |
| Sub-total |  |  | 470 | 531 | 13,799 | 165,585 |

## General Costs(Overheads)

| Packing materials | 20 | 240 |
| :--- | :---: | :---: |
| Rent | 75 | 900 |
| Utilities(power) | 30 | 360 |
| Labour | 775 | 9300 |
| Preliminary costs | 250 | 3000 |
| Other costs | 100 | 1200 |
| Depreciation (Asset write off) Exp | 242 | 2,910 |
| Sub-total | 1,492 | 17,910 |
| Total Operating costs | 15,291 | 183,495 |

1. Production costs assumed are for 312 days per year with a daily capacity of 462 pairs of bathroom sandals.
2. Depreciation (fixed asset write off) assumes _4_ years life of assets written of 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 production Costs and Price Structure

| Item | Qty/day | Qty/Yr | @ | Pdn cost/Yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bathroom <br> sandals | 462 | 144,144 | 1.27 | 183,495 | 1.9 | 278,198 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 891.66 | 23,183 | 278,198 |
| Less: Production and <br> Operating Costs | 588 | 15,291 | 183,494 |
| Profit | 304 | 7,892 | 94,704 |

## Raw materials and equipments

Raw materials can be imported from countries like Ghana and equipments can be obtained from the local market

## Government Incentives Available

Government is encouraging small scale businesses and income generating activities to eradicate poverty through

## Trade Sector



## MAKING RUBBER ADHESIVE

## Introduction

This profile envisages the establishment of a plant that will make Rubber Cement. Rubber cement is an adhesive made from elastic polymers mixed in a solvent such as acetone and hexane 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.

The total Capital Investment cost to start this project is estimated at USD13,610. The predicted annual revenue is USD 673,920 , with a net profit of $23 \%$ and a payback of 2 months.

## 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 $100 \mathrm{lb}(45 \mathrm{~kg})$ in size.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount <br> $\mathbf{\$}$ |
| :--- | :---: | :---: | :---: | :---: |
| Truck | No. | 1 | 8,000 | 8,000 |
| Grinder | No. | 1 | 3,100 | 3,100 |
| Mixer | No. | 1 | 750 | 750 |
| Tanks | No. | 5 | 100 | 500 |
| Furniture | No. | 2 | 50 | 100 |
| Weighing Scale | No. | 1 | 160 | 160 |
| Packaging Machine | No. | 1 | 1,000 | 1,000 |
| Total Amount |  |  |  | 13,610 |

## Operating Costs in US\$

| Item | Units | @ \$ | Qty/ <br> day | Prod. <br> Cost/ <br> day\$ | Prod. <br> Cost/ <br> month\$ | Prod. Cost/ <br> Year[1]\$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |

## Direct Costs

| Rubber | Kgs | 0.77 | 500 | 385 | 10,010 | 120,120 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Heptanes | Ltrs | 45 | 25 | 1125 | 29,250 | 351,000 |
| Ethanol | Ltrs | 0.48 | 75 | 36 | 936 | 11,232 |
| Sub total |  |  |  | 1,546 | 40,196 | 482,352 |

## 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 | 284 | 3,403 |
| Sub - total | 3,084 | 37,003 |
| Total Operating Costs | 43,280 | 519,355 |

## Project Product Costs \& Price Structure

| Item | Qty/ <br> dayLtrs | Qty/yr | @\$ | Pdn Cost/ <br> yr\$ | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Rubber <br> Cement | 600 | 187,200 | 2.77 | 519,355 | 3.6 | 673,920 |

## Profitability Analysis

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 2,160 | 56,160 | 673,920 |
| Less: Production \& Operating Costs | 1,665 | 43,280 | 519,355 |
| Profit | 495 | 12,880 | 154,565 |

## Sources of Supply of Raw Materials

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

## Government Facilities and Incentives Available:

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

## Trade Sector



## MOBILE FUEL DISTRIBUTION

## Introduction

Fuel is a commodity that is used by almost every household. The need to take services near to the people especially in rural and semi urban areas by selling fuel especially kerosene can be a good profitable venture as most people in rural areas buy fuel at relatively high Prices.

The business idea target is to reduce on the costs incurred by many middle men businesses in the rural and semi urban areas which are reflected in form of Price, therefore, it will entail selling at relatively lower Price.

The project is expected to yield annual revenue of US $\$ 436,800$, with a net profit margin $12 \%$ and a payback period of 5 months.

Investment Scale, Capital Requirements \& Equipment The investment scale depends on the intended objectives of the entrepreneur. The capital requirements and equipment needed is as tabled below.

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | $@$ | Total(\$) |
| :--- | :--- | :--- | :--- | :--- |
| Delivery Van (2.5-tones) | No | 1 | 18,000 | 18,000 |
| Fuel tank (1,500 ltrs) | No | 1 | 4,000 | 4,000 |
| Funnel | No | 1 | 27.5 | 27.5 |
| Furniture \& Fixture | No |  | - | - |
| Total |  |  |  | 410 |

## Production and Operating Costs

(a)Direct materials, Supplies and Costs

| Cost Item | Units | @ | Qty/day | Pdn cost/ <br> day | Pdn cost/ <br> mth | Pdn <br> cost/yr |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Direct Costs

| Kerosene | Ltrs | 1.16 | 1,000 | 1160 | 30,160 | 361,920 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sub-total |  |  | 1,000 | 1160 | 30,160 | 361,920 |

## General Costs (Overheads)

| Distribution costs (Fuel) | 835 | 10,020 |
| :--- | :---: | :---: |
| Salaries \&Wages | 230 | 2,760 |
| Repairs \& Maintenance | 70 | 840 |
| Miscellaneous | 100 | 1,200 |
| Office rent | 150 | 1,800 |
| Depreciation | 467 | 5,609 |
| Sub-total | 1,852 | 22,229 |
| Total Operating Costs | 32,012 | 384,149 |

1. Production costs assumed 312 days per year with daily supply of 1,000 litres of kerosene
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. Total monthly days assumed are 26 work days.
5. The valuation currency used is United States Dollars

Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn cost/ <br> yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fuel (Kerosene) | 1000 | 312,000 | 1.2 | 384,149 | 1.4 | 436,800 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,400 | 36,400 | 436,800 |
| Less: Production \& Operating Costs | 1231 | 32,012 | 384,149 |
| Profit | 169 | 4,388 | 52,651 |

## Government Facilities \& Incentives

There is no VAT on fuel and therefore there are no extra costs to be incurred in form of VAT.

## Trade Sector

## DECORATION OF CERAMIC WARE

## Introduction

Ceramic wares are precious products that have a high demand by many users. This project idea has been developed basing on the need to explore the abundant market that exists in the country as most of the ceramic ware is imported. The estimated fixed capital is 42,680 US\$, with operating costs of 100,041 US $\$$, and an estimated revenue of $125,424 \mathrm{US} \$$ in the first year of operation.

## Production Capacity, Technology \& Process

The process of decorating ceramic ware takes majorly two processes namely;

## Plastic decoration form and painting form.

In plastic form, ceramic decoration is accomplished while the clay is pliable. This form includes the physical shaping of the object itself, incising, impressing, embossing, or ornamentation (ceramic flower application).

The painting form of ceramic decoration pertains to the surface coloring and includes slip painting, under glaze, glaze, and over glaze types. This type of decoration changes the surface of the ware both eye and sense touch.

## Capital Investment Requirements in US \$

| Capital investment item | units | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Land and Buildings | No | - | - | 16,000 |
| Powerful Computers | No | 1 | 2,500 | 2,500 |
| Image Scanners | No | 2 | 1,120 | 2,240 |
| Multi-colour printing equipment | No | 1 | 2,280 | 2,280 |
| Furniture \&Fittings | No | - | - | 2,500 |
| Electric Kiln | No | 1 | 5,890 | 5,890 |
| Delivery Van | No | 1 | 9,000 | 9,000 |
| Other Tools | No | - | - | 2,270 |
| Total |  |  |  | 42,680 |

## Production and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost/ <br> mth | Pdn <br> cost/yr |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct Costs

| Precious metals | Kgs | 8 | 2 | 16 | 416 | 4,992 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Metal Oxides | Kgs | 5.8 | 2 | 11.6 | 301.6 | 3,619 |
| Powdered Glass | Kgs | 2.2 | 7 | 15.4 | 400.4 | 4,805 |
| Ceramic ware | Pcs | 2 | 60 | 120 | 3120 | 37,440 |
| Painting materials | Pcs | 4.2 | 4 | 16.8 | 436.8 | 5,242 |
| Printing frames <br> materials | Pcs | 1.9 | 5 | 9.5 | 247 | 2,964 |
| Magazines Other <br> materials | Pcs | 2.7 | 3 | 8.1 | 210.6 | 2,527 |
| Sub-total |  |  | 83 | 197 | 5,132 | 61,589 |

General Costs(Overheads)

| Labour costs | 1,400 | 16,800 |
| :--- | :---: | :---: |
| Utilities | 561 | 6,732 |
| Administration expenses | 208 | 2,500 |
| Selling \& distribution | 313 | 3,750 |
| Miscellaneous expenses | 167 | 2,000 |
| Depreciation | 556 | 6,670 |
| Sub-total | 3,205 | 38,452 |
| Total Operating Costs | 8,337 | 100,041 |

1. Production costs assumed 312 days per year with daily capacity of producing 60 pieces of ceramic ware
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. Total monthly days assumed are 26 -days.
5. The valuation currency used is United States Dollars.

Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> cost/yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Decorated Ceramic <br> Ware | 60 | 18,720 | 5.3 | 100,041 | 6.7 | 125,424 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 402 | 10,452 | 125,424 |
| Less: Production \& Operating Costs | 321 | 8,337 | 100,041 |
| Profit | 81 | 2,115 | 25,383 |

## Market Analysis

The market for ceramic wares readily exists in the country since most of the products are household products.

## Trade Sector


$\square$

## MAKING WIRE NAILS

## Introduction

This business idea is for manufacturing and marketing of wire nails. The nails consist of hard drawn bright mild steel wire with a head, which helps in driving the nail inside. They are made in various sizes. Wire nails are used for roofing, fastening in carpentry and woodwork, fencing, etc. With the rise in construction activities, both commercial and private, the demand for wire nails is bound to increase. Setting up a plant to make wire nails would thus meet this demand. This business idea is premised on manufacturing 769 kilograms of three inch wire nails per day which translates into $239,928 \mathrm{kgms}$ of wire nails per annum. The revenue potential is estimated at US $\$ 55,583$ per month translating into US $\$ 667,000$ per annum with a sales margin of $33 \%$ and total investment requirement of US $\$ 71,300$ for the first year of project operation.

## Production Capacity

The plant at the onset of production has a minimum capacity of 20 tones of nails each month. As a bigger segment of the market is captured, output can be increased.

## Manufacturing Process Description and Technology

The manufacturing technology involves feeding steel wire in the form of coil into a wire nail-forming machine. At first, cold heading forms the head and then the point takes shape. The nails are tumbled in a tumbling barrel with sawdust or similar materials to remove burrs. The finished nails are weighed and packed for marketing.

## Investment Scale Capital Requirements and Equipments

 The Investment scale depends on the set goals and objectives of the project and the market for the products.
## The Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Automatic Wire Nail making machine | No | 1 | 25,000 | 25,000 |
| Grinding machine with 1-horse power <br> Motor and four Grinding Stones | No | 2 | 12,000 | 24,000 |
| Steel Polishing Drums | No | 4 | 700 | 2,800 |
| Wire Drawing Machine with 5-horse <br> power Motor | No | 2 | 4,500 | 9,000 |
| Delivery Van | No | 1 | 8,000 | 8,000 |
| Other Tools |  |  | 2,000 | 2,500 |
| Total |  |  |  | 71,300 |

## Production and operating costs in US\$

| Cost Item | Units | Unit <br> cost | Qty/ <br> day | cost/ <br> day | cost/ <br> month | cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Iron and steel oar | tone | 680 | 1 | 680 | 17,680 | 212,160 |
| Lubricant Oil | Liter | 3.2 | 200 | 640 | 16,640 | 199,680 |
| Cotton Waste | Kg | 0.3 | 200 | 60 | 1,560 | 18,720 |
| Packing materials | No | 2.4 | 10 | 24 | 624 | 7,488 |
| Sub-total |  |  | 411 | 1404 | 36,504 | 438,048 |

## General Costs (Overheads)

| Other materials | 1,000 | 12,000 |
| :--- | :---: | :---: |
| Rent | 750 | 9,000 |
| Labour | 1,000 | 12,000 |


| Utilities (Power \$ water) | 250 | 3,000 |
| :--- | :---: | :---: |
| Preliminary Costs | 250 | 3,000 |
| Miscellaneous costs | 250 | 3,000 |
| Depreciation (Asset write off)Exp | 1,485 | 17,825 |
| Sub-total | 4,985 | 59,825 |
| Total Operating Costs | 41,489 | 497,873 |

1. Production costs assumed are for 312 days per year with a daily capacity of 769 Kilograms of 3 inch wire Nails. But other nails like 1 inch nail, 2 inch nail etc, can also be manufactured using the same production process.
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 Cost and Price Structure

| Item | Qty/ <br> day | Qty/yr | Unit <br> cost | Pdn <br> cost/day | Unit <br> cost | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wire Nails of 3 <br> inches | 769 | 239,928 | 2 | 497,873 | 2.78 | 667,000 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 2,138 | 55,583 | 667,000 |
| Less: Production and Operating <br> Costs | 1,596 | 41,489 | 497,873 |
| Profit | 542 | 14,094 | 169,127 |

## Market Analysis

The market for wire nails is high throughout the year both in rural and urban areas.

## Source of Supply of Machinery and Equipments

Equipments and Machinery are imported from Chain and Japan while raw materials are imported from Iran or South Africa

## Government Incentives Available

There can be a saving in terms of taxes since there is no VAT charged on raw materials.

## Trade Sector



## MANUFACTURING LEATHER BELTS

## Introduction

This business idea is for production and marketing of leather belts. Real leather belts are one accessory of apparel made of cowhides or other animal skin. It is a flexible band worn around the waist. A belt supports trousers or other articles of apparel and it serves for style and decoration. Their market structure is high since they are of good quality and they are used by almost all people with trousers and others.

The business idea is premised on three hundred working days single shift of 8 hours per day the unit is designed to have production of 1,000 belts per day which translates into 312,000 leather belts per year. The revenue potential is estimated at US $\$ 197,600$ per month translation into US $\$ 2,371,200$ per year with a sales margin of $27 \%$ with total capital investment requirement of US $\$ 67,660$ and operational cost of $1,868,893$ for the first year of project Operation.

## Production Capacity

The production capacity depends on the materials and equipments used in the production process.

## Technology and process description

This project involves use of strap cutting machine, stitching machine, Riveting, punching machine and working tools. The production process involves strap cutting, stitching, riveting, coloring/dying, pressing designs, fixing fasteners/buckles and punching.

## Scale of Investment, Capital Investment Requirement and Equipment

The project is on a small scale investment and capital investment depends on the intended number of outputs a manufacturer is targeting.

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Strap cutting machine | No | 2 | 6,000 | 12,000 |
| Stitching machine | No | 2 | 8,100 | 16,200 |
| Riveting machine | No | 2 | 7,500 | 15,000 |
| Punching machine | No | 2 | 300 | 600 |
| Working tools | Set | 4 | 390 | 1,560 |
| Delivery van | No | 1 | 9,000 | 9,000 |
| Preliminary costs | No | 1 | 300 | 300 |
| Construction cost (Building) | No | 1 | 10,000 | 10,000 |
| Land | Piece | 1 | 3,000 | 3,000 |
| Total |  |  |  | 67,660 |

## Production and Operation Costs

Direct Materials, Supplies and Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn cost// <br> day | Pdn cost// <br> month | Pdn cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Leather | roll | 10 | 200 | 2,000 | 52,000 | 624,000 |
| Rivets | No | 1.5 | 1,000 | 1,500 | 39,000 | 468,000 |
| Buckles | No | 2 | 1,000 | 2,000 | 52,000 | 624,000 |
| Dye | kg | 2.3 | 50 | 115 | 2,990 | 35,880 |


| Packaging <br> materials | roll | 11.2 | 20 | 224 | 5,824 | 69,888 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sub-total |  |  | 2,270 | 5,839 | 151,814 | $1,821,768$ |

General Costs(Overheads)

| Utilities (Power \& water) | 250 | 3,000 |
| :--- | :---: | :---: |
| Labour | 2,000 | 24,000 |
| Miscellaneous Costs | 500 | 6,000 |
| Depreciation(Asset write off) Exp | 1,177 | 14,125 |
| Sub-total | 3,927 | 47,125 |
| Total Operating Costs | 155,741 | $1,868,893$ |

1. Production costs assumed are for 312 days per year with a daily capacity of 1,000 Leather belts.
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 work days.

## Project Product Cost and Price Structure in

| Item | Qty/day | Qty $/ \mathrm{Yr}$ | $@$ | Pdn cost $/ \mathrm{Yr}$ | UPx | $\mathrm{T} /$ rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Leather Belts | 1,000 | 312,000 | 6.0 | $1,868,893$ | 7.6 | $2,371,200$ |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 7,600 | 197,600 | $2,371,200$ |
| Less: Production and Operating <br> Costs | 5,990 | 155,741 | $1,868,893$ |
| Profit | 1,610 | 41,859 | 502,307 |

## Market Analysis

It is projected that leather belts have a wider market both internally and externally because of their good quality.

## Source of supply of Machinery, Equipment and Raw

## Materials

Supply of raw materials is done locally and equipments can be got from hardware shops.

## Trade Sector

## MAKING CARD BOARD CARTONS FROM RECYCLED CARDBOARD

## Introduction

This business idea is for making card board cartons from recycled cardboard. Cardboard boxes (cartons) are industrially prefabricated boxes, primarily used for packaging goods and materials. This box uses regular cardboard that usually gets thrown away. It makes a sturdy box for storing small things; you can basically make it any size you like. They have the inherent advantages of being light in weight, easy to fabricate and store. Cardboard boxes are used for packing TVs, Fridges, and bulky things like soap, toothpastes and garments. The market potential covers the entire packaging industry. The business idea aims at production of 62,400 boxes annually. The revenue potential is estimated at $\$ 90,355$ per year with a sales margin of $28 \%$. The total capital investment for the project is $\$ 9,614$.

## Plant Capacity

The envisaged project has a minimum plant capacity of 200 boxes per day on the basis of 8-hour single working daily shifts. Output can then be increased with time depending on demand as operations gain experience.

Capital Investments Requirements

| Capital Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Box Cutter | No | 1 | 21 | 21 |
| Carton Stapler | No | 1 | 243 | 243 |
| Stitching machine | No | 1 | 350 | 350 |
| Delivery Van | No | 1 | 9,000 | 9000 |
| TOTAL |  |  |  | 9,614 |

## Production Process

The process description involves, deciding the size and dimensions of your box,(drawing and cutting), gluing the pieces together, sanding the pieces to see if they are even, let the pieces dry, join them all and the product is ready for use. Generally, boxes are prepared to customer specifications and the boxes/cartons can be prepared indifferent sizes, designs and colors

## Production and Operating Cost

Cost Item $\quad$ Units \begin{tabular}{c|c|c|c|c|c|}
@ <br>
day

 

Qty/ <br>
day

 

Pdn Cost/ <br>
day

 

Pdn Cost/ <br>
mth

$\quad$

Pdn Cost/ <br>
Year1
\end{tabular}

| Direct costs3 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Card <br> Boards | No | 0.58 | 200 | 116 | 3,016 | 36,192 |  |
| Staples | Boxes | 0.42 | 5 | 2.1 | 55 | 655 |  |
| Fixing <br> Materials | Boxes | 0.23 | 10 | 2.3 | 60 | 718 |  |
| Ruler and <br> Pens | No | 0.2 | 10 | 2 | 52 | 624 |  |
| Sub-total |  |  |  |  | 3,182 | 38,189 |  |

General costs (Overheads)

| Labour | 400 | 4,800 |
| :--- | :---: | :---: |
| Utilities (Electricity) | 200 | 2,400 |
| Selling and Distribution | 100 | 1,200 |
| Administrative expenses | 100 | 1,200 |
| Repairs | 75 | 900 |
| Shelter | 150 | 1,800 |
| Depreciation (Asset write off) Expenses | 200 | 2404 |
| Plant and Machinery | 197 | 2,364 |
| Sub-total | 1,422 | 17,068 |
| Total Operating Costs | 4,605 | 55,257 |

1. Production is assumed for 312 days per year.
2. Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
3. A production Month is assumed to have 26 days.

## Project product Costs and Price Structure

| Item | Qty /day | Qty/yr | Unit <br> cost | Pdn cost/ <br> yr | UPx | $\mathrm{T} / \mathrm{rev}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Small <br> boxes | 60 | 18,720 | 0.25 | 4,680 | 0.49 | 9,173 |
| Medium <br> Boxes | 60 | 18,720 | 0.75 | 14,040 | 1.27 | 23,774 |
| Large <br> Boxes | 80 | 24,960 | 1.5 | 37,440 | 2.3 | 57,408 |
| Total | 200 | 62,400 |  | 56,160 |  | 90,355 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 289.6 | 7,530 | 90,355 |
| Less: Production and Operating <br> Costs | 177.10 | 4,605 | 55,257 |
| Profit | 112.50 | 2,925 | 35,098 |

## Sources of supply of equipments

Equipments can be got from India, or fabricated locally at Katwe (Uganda) at modest Prices

## Trade Sector



## MAKING CARBON PAPER

## Introduction:

This business idea is for production and marketing of carbon paper. Carbon paper is paper coated on one side with a layer of a loosely bound dry ink or pigmented coating, usually bound with wax. It is used for making one or more copies simultaneously with the creation of an original document. The total investment requirement is USD1,620 with an operational cost of USD428,157 per year, with TRs estimated at US\$ 561,600 per year and production capacity estimated at 4 cartons per day, each carton with 100 pieces.

## Production process

The process involves preparation of coating mix, coating on the paper surface, and cutting it into sizes for the market.

## Capital investment in US\$

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Coating machine | No | 1 | 600 | 600 |
| Printing machine | No | 1 | 410 | 410 |
| Paper cutting machine | No | 1 | 100 | 100 |
| Ball mill | No | 1 | 213 | 213 |
| Packing materials(kg) | No | 10 | 29.7 | 297 |
| Total cost on machinery |  |  |  | 1,620 |

Production and operating costs in US\$

| Cost <br> Item | Units | @ | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost// <br> month | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Papers | Grams | 2.6 | 500 | 1,300 | 33,800 | 405,600 |
| Dyes and <br> waxes | Ltrs | 4.5 | 10 | 45 | 1,170 | 14,040 |
| Oil | Ltrs | 4 | 4 | 16 | 416 | 4,992 |
| Sub- <br> totals |  |  | 514 | 1,361 | 35,386 | 424,632 |

## General costs(overheads)

| Utilities(water and power) | 35 | 420 |
| :--- | :---: | :---: |
| Labour | 50 | 600 |
| Rent | 125 | 1500 |
| Miscellaneous costs | 50 | 600 |
| Depreciation(Asset write off)Expenses) | 34 | 405 |
| Sub -total | 294 | 3,525 |
| Total Operating Costs | 35,680 | 428,157 |

1. Production costs assumed 312 days per year with a daily capacity of 5 cartons carbon papers
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 structures

| Item | Qty/ <br> day | Qty/yr | @ | Pdn cost <br> $/ y r$ | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Carbon <br> papers | 500 | 156,000 | 2.74 | 428,157 | 3.6 | 561,600 |
| Total |  | 156,000 |  |  |  | 561,600 |

Probability Analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,800 | 46,800 | 561,600 |
| Less production and operating <br> Costs | 1,372 | 35,680 | 428,157 |
| Profit | 428 | 11,120 | 133,443 |

## Market Analysis

Carbon papers have a steady market. Carbon papers are used in banks, offices, micro-finance institutions, educational institutions therefore there is a huge potential for carbon paper.

## Sources of Raw Materials and Equipments

Raw materials are locally available and equipments can be imported from China or India.

## Government facilities and incentives

Some of these items like chemicals used in this industry are imported tax free.

## Trade Sector



## MANUFACTURING OF NAIL POLISH

## Introduction

Nail polish is a cosmetic product used by the majority of women in Uganda. It has got market both in rural and urban areas of the country.

This project idea was developed on the basis of using the simplest technology in the manufacturing of nail polish with an estimated fixed capital of 4,850 US\$, and operating costs of 175,817 US $\$$ used to produce 11,856 liters of nail polish to realize 330,439 US $\$$ revenue in the first year of operation.

## Production Capacity, Technology and Process

The production technology is very complex and may involve the use of robots, but recently a home made nail polish can be manufactured using a much simpler technology. Here the primary film former called nitrocellulose is mixed with a shimmer or metallic pearl and this may create a good shade if applied but care has to be taken by first applying it on the nails to test its quality.

## Investment Scale, Capital Requirements and Equipment

The investment scale is dependant on the set project objectives.

## Capital Investment Requirements

| Capital investment item | units | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Laboratory testing kit | No | 1 | 500 | 500 |
| Utensils | No | - | - | 440 |
| Portable stirrer with mortar | No | 1 | 2,400 | 2,400 |
| Bottle filling machine | No | 1 | 650 | 650 |
| Containers(Drums) | No | 2 | 230 | 460 |
| Other tools | No | - | - | 400 |
| Total |  |  |  | 4,850 |

## Production and Operating Costs

| Cost Item | Units | @ <br> day | Qty/ <br> day | Pdn cost/ <br> day | Pdn cost// <br> mth | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Nitrocellulose | Kgs | 12.5 | 25 | 312.5 | 8,125 | 97,500 |
| A shimmer | Kgs | 9 | 7 | 63 | 1,638 | 19,656 |
| Metallic pearl | Kgs | 6.9 | 3 | 20.7 | 538 | 6,458 |
| Ethyl alcohol | Ltrs | 6.4 | 3 | 19.2 | 499 | 5,990 |
| Bottes-25ml <br> (packaging) | Pcs | 0.05 | 1,513 | 75.65 | 1,967 | 23,603 |
| Other materials |  | - | - | - | 167 | 2,004 |
| Sub-total |  |  |  | 491 | 12,934 | 155,212 |

## General Costs (Overheads)

| Labour | 767 | 9,200 |
| :--- | :---: | :---: |
| Utilities | 538 | 6,450 |
| Rent | 500 | 6,000 |
| Administrative expenses | 204 | 2,450 |
| Cleaning \& toiletries | 100 | 1,200 |
| Selling \& distribution | 200 | 2,400 |
| Miscellaneous expenses | 146 | 1,750 |
| Depreciation | 101.04 | 1212.5 |
| Sub-total | 2,556 | 30,663 |
| Total Operating Costs | 15,490 | 185,874 |

1. 2) Production costs assumed are for 312 days per year with daily production capacity of 38 litres of nail polish.
1. 2) Depreciation (fixed asset write off) assumes 4 -years life of assets written off at $25 \%$ per year for all assets.
1. 3) Direct costs include: materials, supplies and other costs that directly go into production of the product
1. 4) Total monthly days assumed are 26 -work days.
1. 5) The valuation currency used is United States Dollars

## Market Analysis

The market for cosmetics is readily available country wide and for successful implementation, it is recommended that products are distributed to supermarkets, salons and cosmetic shops that can easily increase sales.

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> cost/yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nail Polish | 1,513 | 472,056 | 0.39 | 185874 | 0.65 | 306,836 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 983 | 25,570 | 306,836 |
| Less: Production \& Operating <br> Costs | 596 | 15,490 | 185,874 |
| Profit | 388 | 10,080 | 120,962 |

## Government Facilities and Incentives

The initial allowance on plant and machinery offered can be an incentive as it reduces on income tax components on the investment.

## Trade Sector



## KING COTTON KNITTED WEARS

## Introduction

This business idea is for making cotton knitted wears. Cotton knitted would serve a big section of low income communities. Cotton knitted outwears such as pullovers, slipovers and children suits etc are substitutes for woolen garments which are expensive. They have a relatively high demand in middle class and low income people areas. The business idea is premised on production of 2,600 pieces per month which translates into 31,200 pieces per Year. The revenue potential is estimated at US $\$ 13,000$ per month which translates into US\$ 156,000 per year with a sales margin of $10 \%$. Total Investment requirement is US $\$ 3,588.53$.

## Capital Investment Requirements

This Business Idea is for both small scale and medium scale investment, and capital injected depends on the desired production capacity.
Capital Investment Requirements in US\$
Capital Investment Requirements in USS

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Over lock stitching machine <br> with motor | No | 1 | 750 | 750 |
| Sawing machine with motor | No | 2 | 1,500 | 3,000 |


| Cutting table | No | 4 | 20 | 80 |
| :--- | :---: | :---: | :---: | :---: |
| Electronic flat Iron | No | 2 | 20 | 40 |
| Steam Pressing table | No | 1 | 250 | 250 |
| Weighing balance | No | 1 | 150 | 150 |
| Stools.etc | No | 4 | 10 | 40 |
| Delivery van | No | 1 | 8,000 | 8000 |
| Total |  |  |  | 12,310 |

## Production Capacity

The production capacity depends on the labour, materials and equipments used in the production process. The business idea is premised on three hundred and twelve working days single shift of 8 hours per day; the unit is designed to have a minimum production of 10 pieces per day which translates into 2,600 pieces per month.

## Technology and process Description

Cotton knitted cloth in various designs and colors combination is purchased from the knitting units. The cloth is spread on the cutting table and required size of garments is cut. These cut pieces are first stitched with lock stitching sewing machines and then over locked. The stitched garments are pressed and then packed for marketing.

## Production and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Knitted <br> fabric | meter | 1.5 | 175 | 262.5 | 6,825 | 81,900 |
| Internal <br> lining | meter | 0.5 | 120 | 60 | 1,560 | 18,720 |
| Buttons | kg | 1 | 0.5 | 0.5 | 13 | 156 |
| Zips | No | 0.4 | 58 | 23.2 | 603 | 7,238 |
| Hooks | kg | 1 | 0.5 | 0.5 | 13 | 156 |
| Cardboard <br> boxes | No | 0.5 | 10 | 5 | 130 | 1,560 |
| Packing <br> materials | No | 0.005 | 100 | 0.5 | 13 | 156 |
| Sub-total |  |  | 464 | 352.2 | 9,157 | 109,886 |

General Costs(Overheads)

| Labour | 1,498 | 17,976 |
| :--- | :---: | :---: |
| Rent | 250 | 3,000 |
| Utilities( water \& power) | 100 | 1,200 |
| Miscellaneous Costs | 100 | 1,200 |
| Depreciation(Asset write off)Exp | 256.45833 | 3,078 |
| Sub-total | 2,204 | 26,454 |
| Total Operating Costs | 11,362 | 136,340 |

1. Production costs assumed are for 312 days per year with a daily capacity of 100 Pieces of cotton Knitted wears.
2. Different knitted wears in different sizes and designs can be made.
3. Depreciation (fixed asset write off) assumes _4_ years life of assets written off at _ $25 \%$ per year for all assets.
4. Direct Costs include materials, supplies and other costs that directly go into production of the product
5. A production month is assumed to have 26 workdays

Project Product Costs and Price Structure in US\$

| Item | Qty/day | Qty/Yr | @ | Pdn cost/ <br> Yr | UPx | $\mathrm{T} / \mathrm{rev}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cotton <br> knitted <br> wears | 100 | 31,200 | 4.37 | 136,340 | 5 | 156,000 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 500 | 13,000 | 156,000 |
| Less: Production and Operating <br> Costs | 437 | 11362 | 136340 |
| Profit | 63 | 1638 | 19660 |

## Market Analysis

Their market potential is high because there is readily available market all over the country and for export to the neighboring countries.

Source of Supply of Machinery, Equipments and.......

## Trade Sector

## BONE CHINA

## Introduction

Bone China porcelain products are decorative products that are used by a range of consumers especially hotels, recreation centers, events management enterprises, office and home decoration enterprises etc.

The targeted output for the project is 39,936 pieces of high quality bone china porcelain products produced annually requiring an estimated fixed capital of US\$ 43,602, operating costs of US\$ 89,548, realizing estimated revenue of US\$ 143,770 , in the first year of operation. The projected net profit margin is at $38 \%$ and having a payback period of 3 years

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Land and Buildings | No | - | - | 16,000 |
| Hammer \& Ball Mills | No | 2 | 1,270 | 2,540 |
| Jaw crushers | No | 1 | 1,290 | 1,290 |
| Electric kiln | No | 1 | 5,890 | 5,890 |
| Wheel throwing machine | No | 2 | 1,900 | 3,800 |
| Mixer | No | 1 | 1,220 | 1,220 |
| Fuel blower | No | 1 | 1,362 | 1,362 |
| Furniture \& Fittings | No | - | 2,500 | 2,500 |
| Delivery van | No | 1 | 9,000 | 9,000 |
| Total |  |  |  | 43,602 |

## Production Capacity, Technology and Process

The manufacturing process involves the following stages;
The raw materials such as: clay, feldspar, silica, stone dust, are first crushed using jaw crushers, hammer mills or ball mills.
they are cleaned to remove improperly sized materials, and later passed into a mixer to mix the cleaned materials.

Using the soft plastic method of production, the materials are shaped by manual molding, jiggering or ram pressing, wheel throwing where the mixed material is put on the wheel and shaped while the wheel turns

After shaping the materials, bisque firing takes place and here heating of the products is done at relatively low temperatures to vaporize volatile contaminants and minimize shrinkage during firing.

The products are passed to an electric kiln where fifing takes place using high temperature ranging between 1,000 to 1,5000c.

The products are left to cool and later packaged for selling and distribution.

## Production and Operating Costs in US\$

(a)Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Clay \&Stone <br> dust | Kgs | 0.028 | 128 | 3.6 | 93.1 | 1,118 |
| Felspar <br> Silica, <br> vanaculanite | Kgs | 18 | 7 | 126 | 3276 | 39,312 |
| Water <br> \& Other <br> materials | Kgs | 0.005 | 4,000 | 20 | 520 | 6,240 |
| Packaging <br> materials | Pcs | 0.229 | 128 | 29.3 | 762 | 9,145 |
| Sub-total |  | 4263 | 179 | 4,651 | 55,816 |  |

## General costs (Overheads)

| Labour costs | 1,217 | 14,600 |
| :--- | :---: | :---: |
| Utilities | 561 | 6,732 |
| Administration expenses | 375 | 4,500 |
| Miscellaneous expenses | 83 | 1,000 |
| Depreciation | 575 | 6,901 |
| Sub-total | 2,811 | 33,733 |
| Total Operating Costs | 7,462 | 89,548 |

1. Production costs assumed are for 312 days per year with daily capacity of producing 128 pieces of bone china porcelain products.
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. Total monthly days assumed are 26 -days.
5. The valuation currency used is United States Dollars

## Project Product Costs and Price Structure

| Item | Qty/day | Qty/yr | @ | Pdn cost/yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bone China <br> Porcelain | 128 | 39,936 | 2.2 | 89,548 | 3.6 | 143,770 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 460.8 | 11,981 | 143,770 |
| Less: Production \&Operating Costs | 287 | 7,462 | 89,548 |
| Profit | 174 | 4,518 | 54,222 |

## Market Analysis

The market for bone China porcelain exists in the country with major consumers such as: supermarkets, restaurants, wholesale shops and retail shops etc.

## Trade Sector



## MAKING NATURAL RUBBER ADHESIVES

## Introduction

The demand for Adhesives is very high in the Paper products industry, Schools, Offices and Craft projects.
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.

The venture is estimated o yield an annual revenue of US $\$ 780,000$, with net profit margin $19 \%$ and payback period of 2 months.

## 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.

## Project Costs

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @\$ | Amount \$ |
| :--- | :---: | :---: | :---: | :---: |
| Delivery Van | No. | 1 | 9,000 | 9,000 |
| Mixer | No. | 1 | 540 | 540 |
| Boiler | No. | 1 | 520 | 520 |
| Rollers | No. | 2 | 238 | 476 |
| Total Amount |  |  |  | 10,536 |

## Operating Costs in US\$

| Item | Units | @ \$ | Qty/ <br> day | Prod Cost/ <br> day | Prod. <br> cost/ <br> month | Prod. <br> Cost/ <br> Year[1]\$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Direct Costs

| Rubber | Kgs | 3.8 | 500 | 1900 | 49400 | 592800 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sub total |  |  |  | 1,900 | 49,400 | 592,800 |

## General Costs (Over heads)

| 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 | 220 | 2,634 |
| Sub - total | 3,420 | 41,034 |
| Total Operating Costs | 52,820 | 633,834 |

## Project Product Costs \& Price Structure

| Item | Qty/ <br> day | Qty/yr | @\$ | Pdn <br> Cost/yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Adhesive | 500 | 156,000 | 4.1 | 633,834 | 5 | 780,000 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 2500 | 65,000 | 780,000 |
| Less: Production \& Operating Costs | 2,032 | 52,820 | 633,834 |
| Profit | 468 | 12,181 | 146,166 |

## Sources of Supply of 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 a liberalized market.

## Trade Sector



## MAKING PAINT BRUSHES AND BRISTLE BRUSHES

## Introduction

There are many types of paint brushes where by some are made from stiff or soft hairs, which be either natural hairs or synthetic fibres. Soft brushes are ideal for thin paint which spreads easily and for detailed work as they form a sharp point which allows for precision painting.

However on the other hand, Bristle Brushes are superbly hand crafted out of the finest quality pure white Chungking bristle hair.

## Plant Capacity

The profiled project envisages production of 100 brushes a day. The revenue potential is estimated at US $\$ 124,800$ annually; the total capital investment for the project is US $\$ 2,772$.The net profit margin for this idea is $54 \%$ and a payback period of 3 months.

## Production Process

Raw fibres, bristles or hair are opened and separated in a spiking machine. They are then dressed and bundled according to their thickness and lengths. MS sheets are cut using a shearing machine and pressed to make ferrules. Ferrules are filled with bristles and dipped in vulcanizing rubber solution from the bottom side to properly soak the roots of the bristles. Wooden handles are placed in an electric hot air baking oven to ensure proper setting of the bristles under controlled temperature after fixing ferrules, the handle is nailed. The brushes are finally inspected and packed.

## Capital Investment Requirements

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Wood working circular saws | No | 2 | 38 | 76 |
| Foot operated guillotine | No | 1 | 1,376 | 1376 |
| Drying ovens | No | 1 | 689 | 689 |
| Shearing machine | No | 1 | 380 | 380 |
| Bristles spiking machines | No | 1 | 251 | 251 |
| Total |  |  |  | 2,772 |

## Production and Operation costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Prod. <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod <br> Cost/ <br> Year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct costs |  |  |  |  |  |  |
| Bristles | Sticks | 0.19 | 100 | 19 | 494 | 5,928 |
| Handles | Pieces | 0.4 | 100 | 40 | 1040 | 12,480 |
| MC Sheets | Sheets | 0.28 | 50 | 14 | 364 | 4,368 |
| Wire nails | No | 0.07 | 200 | 14 | 364 | 4,368 |
| Peal Pins | No | 0.1 | 200 | 20 | 520 | 6,240 |
| Vulcanizing <br> Solution | Litres | 0.26 | 50 | 13 | 338 | 4,056 |
| Sub-total |  |  |  |  | 3,120 | 37,440 |

## General costs (Overheads)

| Labour | 400 | 4,800 |
| :--- | :---: | :---: |
| Utilities | 500 | 6,000 |
| Selling and Distribution | 150 | 1,800 |
| Administrative expenses | 200 | 2,400 |
| Shelter | 400 | 4,800 |
| Depreciation (Asset write off) Expenses | 58 | 693 |
| Sub-total | 1,708 | 20,493 |
| Total Operating Costs | 4,828 | 57,933 |

1. Production is assumed for 312 days per year
2. Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
3. A production Month is assumed to have 26 work days.

## Project Product costs and Price Structure

| Item | Qty / <br> day | Qty/yr | @ | Pdn/ <br> yr | UPx | T/ <br> revenue |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Brushes | 100 | 31,200 | 2 | 57,933 | 4 | 124,800 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 400 | 10,400 | 124,800 |
| Less: Production and Operating <br> Costs | 186 | 4,828 | 57,933 |
| Profit | 214 | 5,572 | 66,867 |

## Market Analysis

Paint brushes and natural bristle fibre brushes are used in every house in rural and urban areas. It is a cost effective technology and has good market potential in rural and urban sectors.

## Sources of Supply of machine

All equipments and raw materials are imported.

## Trade Sector



## MAKING HAND MADE PAPER

## Introduction

This Business Idea is about the manufacturing of paper from agro-waste and cotton waste. It is popularly known as hand paper because the production process is labour oriented. Paper and paper products are of great value to mankind in modern times. Paper is a basic means or medium of communication, and of great use in dissemination, capture, and storage of information. This is an ideal project because the demand is immense and all paper used in this country is imported.

Secondly, the paper produced is cheap and the raw materials are readily available locally. Thirdly it could be located in rural areas where the raw materials are in plenty, and where the end users are found instead of transporting it long distances.

The project requires estimated fixed capital of US\$ 12,300 and operating costs of US\$ 325,635 generating revenue of US $\$ 499,200$ This venture is estimated to yield a net profit margin of $35 \%$ and a payback period of 3 months.

## Production Process and Capacity

This process produces paper between 150 to 600 grams and about one to two tons could be produced every day. Waste paper as well as grass, jute, rice straw and other agro-wastes are made into pulp by cutting them into small pieces that easily dissolve in water and turn into a paste form which is the pulp. This is then refined and colour and chemicals are added. A wet sheet is formed on the mould and is transferred to felt. The cylinder moulded paper is dried and polished over a roller and the paper produced is taken in form of sheets.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | total |
| :--- | :--- | :--- | :--- | :--- |
| Rug Chopper | No | 1 | 1,250 | 1,250 |
| Digester | No | 1 | 100 | 100 |
| Hollander Beater | No | 1 | 300 | 300 |
| Agitator/Shaker | No | 1 | 350 | 350 |
| Cylinder Mould | No | 1 | 300 | 300 |
| Hydraulic Press | No | 1 | 500 | 500 |
| Drying Chamber equipment | No | 1 | 1,000 | 1,000 |
| Calendaring machine | No | 1 | 1,000 | 1,000 |
| Paper cutting machine | No | 1 | 1,500 | 1,500 |
| Knife Grinder | No | 1 | 1,500 | 1,500 |
| Delivery Van | No | 1 | 4,000 | 4,000 |
| Furniture \& Fittings | No | - | - | 500 |
| Total |  |  |  | 12,300 |

## Production and Operating Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost/ <br> mth | Pdn <br> Cost/yr |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: |

## Direct Costs

| Agro waste \&waste <br> paper | Tns | 25 | 3 | 75 | 1,950 | 23,400 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rosin | kgs | 3.5 | 50 | 175 | 4,550 | 54,600 |
| Whitening agent | kgs | 4.4 | 50 | 220 | 5,720 | 68,640 |
| Starches | kgs | 1.2 | 150 | 180 | 4,680 | 56,160 |


| Caustic Soda | kgs | 1.3 | 50 | 65 | 1,690 | 20,280 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Bleaching powder | kgs | 4 | 50 | 200 | 5,200 | 62,400 |
| Dyes \&other <br> chemicals | kgs | 0 | - | - | 500 | 6,000 |
| Sub-total |  |  | 353 | 915 | 24,290 | 291,480 |

## General Costs(Overheads)

| Rent | 400 | 4,800 |
| :--- | :---: | :---: |
| Labour | 1,000 | 12,000 |
| Utilities | 640 | 7,680 |
| Cleaning and Toiletries | 100 | 1,200 |
| Selling \& distribution | 325 | 3,900 |
| Miscellaneous | 125 | 1,500 |
| Depreciation | 256.25 | 3,075 |
| Sub-total | 2,846 | 34,155 |
| Total Operating Costs | 27,136 | 325,635 |

## Market Analysis

As far as paper is concerned, any amount or tonnage that is produced would find market. Currently all sorts of paper in this country are imported. Thus, the potential is inexhaustible. Secondly, this is a project which would easily be located where the consumers are since the major input raw materials are everywhere.

Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> Cost/ <br> yr | UPx | Total <br> Rve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Handmade Paper | 800 | 249,600 | 1.30 | 325,635 | 2 | 499,200 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,600 | 41,600 | 499,200 |
| Less: Production and Operating <br> Costs | 1,044 | 27,136 | 325,635 |
| Profit | 556 | 14,464 | 173,565 |

## Trade Sector



## REFINING OF USED LUBRICATING OIL

## Introduction

This business idea is for refining of used lubricating oil. Lubricating oil is extracted from crude petroleum by a process of distillation. It falls under the category of high value products and the demand for it keeps on growing. The market size is big as it is used for any machine or instruments to increase their efficiency and longevity; to reduce the wear and tear caused by friction. It can be refined to make it very close to original lubricating oil. The business idea is premised on production of 3,500 liters of refined lubricating oil per month which translates into 42,000 liters per year. The revenue potential is estimated at US $\$ 10,530$ per month translating into US $\$ 126,360$ per year with a profit margin of $20 \%$. Total investment requirement is US $\$ 16,800$ for the first year of the project.

## Production Process

The used lubricating oil is collected in tanks. The oil is transferred to a dehydration tank through a pump and subsequently heated to separate water from oil. The moisture-free oil is transferred to a settling tank and is treated with concentrated sulfuric acid for impurities to settle down. The mixture is again heated under vacuum for 3-4 hours and the clear liquid is siphoned and additives are mixed to give desired properties.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Storage Tank | No | 2 | 800 | 1,600 |
| Settling Tank | No | 1 | 2,500 | 2,500 |
| Aid Treatment Tank | No | 1 | 1,750 | 1,750 |
| Vacuum Distillation | No | 1 | 2,000 | 2,000 |
| Receiver for fuel dilution | No | 1 | 2,500 | 2,500 |
| Gas Absorber | No | 1 | 1,250 | 1,250 |
| Horizontal plate | No | 2 | 450 | 900 |
| Condenser made of M.S plate | No | 1 | 1,500 | 1,500 |
| Laboratory testing Equip | Set | 1 | 1,000 | 1,000 |
| Oil fired burner | No | 1 | 1,500 | 1,500 |
| Drums | No | 20 | 15 | 300 |
| Total |  |  |  | 16,800 |

## Production and Operating Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Cost |  |  |  |  |  |  |
| Used lube oil | Ltrs | 0.7 | 80 | 56 | 1,456 | 17,472 |
| Concentrated Sulfuric <br> acid | Ltrs | 1.5 | 30 | 45 | 1,170 | 14,040 |
| Fuller | Ltrs | 1.5 | 20 | 30 | 780 | 9,360 |
| Lime | kgs | 1.15 | 15 | 17.25 | 449 | 5,382 |
| Additives | Ltrs | 0.5 | 15 | 7.5 | 195 | 2,340 |
| Sub-total |  |  |  |  | 4,050 | 48,594 |

## General Costs(Overheads)

| Labour | 4,000 | 48,000 |
| :--- | :---: | :---: |
| Rent | 250 | 3,000 |
| Utilities(water \& power) | 200 | 2,400 |
| Other Costs(Miscellaneous) | 500 | 6,000 |
| Depreciation(Asset write off) Exp | 350 | 4,200 |


| Sub-total | 5,300 | 63,600 |
| :--- | :---: | :---: |
| Total Operating Costs | 9,350 | 112,194 |

1. Production costs assumed are 312 days per year with a daily capacity of 135 liters of Refined Lubricating OiL
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 \& Price Structure

| Item | Qty/ <br> day | Qty/ <br> Yr | Unit <br> cost | Pdn/Yr | Unit <br> px | $\mathrm{T} / \mathrm{rev}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Refined Lubricating <br> Oil | 135 | 42,000 | 2.66 | 112,194 | 3 | 126,360 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 405 | 10,530 | 126,360 |
| Less: Production and Operating <br> Costs | 360 | 9,350 | 112,194 |
| Profit | 45 | 1,181 | 14,166 |
|  |  |  |  |

## Market Analysis

There is a high demand for lubricating oil compared to its supply both in urban and rural areas and this is because about two thirds of the lube oil is used by industry while the remaining one third goes for automobiles. And it is also used for blending in various types of like spindle oil, transformer oil, axle oil and hydraulic oil, etc.

## Availability of Raw materials and Equipments

Raw materials like used lube oil, lime and additives can be got locally from Kilembe mines and can be imported from Libya while equipments like Absorber and Vacuum pump for distillation can be imported from China and Japan.

## Trade Sector



MAKING POWER INVERTORS

## Introduction

The business idea is for making and marketing of Power Invertors. This business idea is premised on production of 15 Invertors per month which translates into 180 Invertors per year. The revenue potential is estimated at US $\$ 9,000$ per month which translates into US $\$ 108,000$ per year. The project cost is US $\$ 108,165$.

## Production Process

Production process involves making a metallic box, sealing all its corners with solidal welding. Building the Oslators, Inverter system, Charging system and Automatic system, putting in switches and sockets

## Capital Investment Requirements in US Dollars

| Item | Unit | Quantity | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Solidaling machine | No. | 1 | 20 | 20 |
| Drill | No. | 1 | 20 | 20 |
| Hand tools | No. | 10 | 12.5 | 125 |
| TC of Machinery |  |  |  | 165 |

## Production and Operation Costs in US\$

## Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty | Prod. <br> cost | Prod. <br> Cost/ <br> month | Prod. <br> cost/ <br> yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Orslator | No. | 25 | 1 | 25 | 650 | 7,800 |
| Transformer | No. | 75 | 1 | 75 | 1,950 | 23,400 |
| Diodes | No. | 5 | 1 | 5 | 130 | 1,560 |
| Thermostat | No. | 8 | 1 | 8 | 195 | 2,340 |
| Circuit board | No. | 3 | 1 | 3 | 65 | 780 |
| Capacitors | No. | 4 | 1 | 4 | 91 | 1,092 |
| Resistor | No. | 0.3 | 1 | 0.3 | 7 | 78 |
| Switch | No. | 4 | 1 | 4 | 104 | 1,248 |
| Fetes | No. | 5 | 22 | 110 | 2,860 | 34,320 |
| Box (metallic) | No. | 25 | 1 | 25 | 650 | 7,800 |
| Sub-total |  |  |  |  | 6,702 | 80,418 |

## General costs (Overheads)

| Utilities (power) | 15 | 180 |
| :--- | :---: | :---: |
| Salaries | 25 | 300 |
| renting | 75 | 900 |
| Depreciation (Assets write off) Expenses | 3 | 41 |
| Sub-total | 118 | 1,421 |
| Total Operating costs | 6,820 | 81,839 |

1. Production costs assumed monthly capacity of 15 Power Invertors
2. Depreciation (fixed assets write off) assumes 4 years life of assets write off of $25 \%$ per year for all assets.
3. Direct costs include: materials, supplies and other costs that directly go into production of the product.

## Project Product Cost and Price Structure

| Item | Period | Output | @ | UPx | TC | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Power <br> Invertors | per month | 15 | 455 | 600 | 6,820 | 9,000 |
|  | per year | 180 | 5,456 | 7,200 | 81,839 | 108,000 |

## Profitability Analysis in US\$

| Profitability item | per day | per month | per year |
| :--- | :---: | :---: | :---: |
| Revenue |  |  |  |
| Power Invertors | 346 | 9,000 | 108,000 |
| Less Prod \& Operating <br> Costs | 262 | 6,820 | 81,839 |
| Profit | 84 | 2,180 | 26,161 |

## Market Analysis

There is an ever-increasing demand for Invertors due to power shortages and interruptions. The market for the invertors is within the country and spreads beyond our borders like Rwanda, Sudan and Congo.

## Availability of Raw Materials and Equipment

All Equipments, tools and other Materials can be got from the local market

## Government Incentives Available

Government is encouraging small scale businesses and income generating activities to eradicate poverty through the Private Sector Foundation of Uganda and "Bonna Bagagawale Programme where subsidies are offered

## Trade Sector



## MAKING SPECTACLE FRAMES

## Introduction

This Business Ideais for manufacture and marketing of spectacle frames from plastic cellulose acetate sheets. They are mass consumption items and are used by those with eye sight problems and for protection from the sun. The project envisages producing 1,300 sets of spectacle frames per month on the basis of 8 hours per working day. This translates into 15,600 sets per annum. The revenue potential is estimated at US $\$ 546,000$ per year with a net profit margin $14 \%$ and a payback period of 3 months. The total investment requirement for the venture US\$ 17,510

## Production Process

Spectacle frames are made in two parts that is; one is the front which holds the two glasses and the other is the two sides which are fitted on each of the front. Generally spectacle frames are specified by Eye size and Bridge size. Eye size is the one which decides the size of the glass which it holds while the bridge size is the distance between the two glasses.

## Capital Investment Requirement in US\$

Capital Investment Requirement in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Sheet cutting machine | No | 1 | 4,300 | 4,300 |
| Pneumatic wire shooting <br> machine | No | 1 | 4,000 | 4,000 |
| Front design machine | No | 1 | 250 | 250 |
| Pneumatic hing fitting machine | No | 1 | 3,250 | 3,250 |
| Nose bumping fixture | No | 1 | 2,000 | 2,000 |
| S.P hand press and bending <br> fixture | No | 1 | 500 | 500 |
| Side grooving machine | No | 1 | 500 | 500 |
| Drill Machine | No | 1 | 560 | 560 |
| Fixture and hammer | No | 2 | 200 | 400 |
| Special purpose fixture with <br> heating box | No | 1 | 250 | 250 |
| Barrel polishing machine | No | 1 | 1,500 | 1,500 |
| Total |  |  |  | 17,510 |

## Production and Operating costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct costs | No | 50 | 10 | 500 | 13,000 | 156,000 |
| Cellulose Nitrates | No | 37 | 5 | 185 | 4,810 | 57,720 |
| Cellulose Acetate <br> Sheets of 4mm to <br> 8mm thickness |  | 85 | 15 | 700 | 18,200 | 218,400 |
| Sub-total |  |  |  |  | 36,010 | 432,120 |

## General Costs(Overheads)

| Rent | 2,200 | 26,400 |
| :--- | :---: | :---: |
| Labour | 20 | 240 |
| Utilities(power) | 250 | 3,000 |
| Other costs | 366 | 4,388 |
| Depreciation (Asset write off) Exp | 365 | 4,378 |
| Sub-total | 3,251 | 39,006 |
| Total Operating costs | 39,261 | 471,126 |

1. Production costs assumed are for 312 days per year with a daily capacity of 231 Spectacle frames.
2. Depreciation (fixed asset write off) assumes a 4 year 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

| Item | Qty/ <br> day | Qty/Yr | @ | Pdn/Yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Spectacle frames | 50 | 15,600 | 30.2 | 471,126 | 35 | 546,000 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,750 | 45,500 | 546,000 |
| Less: Production and Operating <br> Costs | 1510.0176 | 39,260 | 471,126 |
| Profit | 240 | 6,240 | 74,874 |

## Government Incentives Available

Government is encouraging small and Medium Enterprises and income generating activities to eradicate poverty through provision of soft loans in the financial institutions.

## Market Analysis

There are more people today wearing spectacles as a creative treasure and many more use sun glasses. Thus plastic frames which are trendy and fashionable have a ready market and their Prices are relatively low.

## Availability of Raw Materials and Equipments

Raw materials and equipments are imported from Japan, China and German.

## Trade Sector

## 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 envelops 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 $50,000 \mathrm{Kgs}$ per year. The project is estimated to yield revenue of US $\$ 109,996$, with a net profit of $29 \%$.

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 |
| TC of tools \& Equipment |  |  |  | 10,300 |

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 \$

## Direct materials, supplies and costs

## 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.

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| LLDPE | Kgms | 7 | 13 | 88 | 2,275 | 27,300 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  <br> pacifiers | Kgms | 100 | 1 | 50 | 1,300 | 15,600 |
| Terpene | Ltrs | 30 | 1 | 30 | 767 | 9,204 |
| Other materials <br> /chemicals | Ltrs | 75 | 1 | 75 | 1,950 | 23,400 |
| Sub-tot |  |  |  | 138 | 3,575 | 42,900 |

## General Costs (Overheads)

| 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 |
| Sub-total | 2,930 | 35,155 |
| Total Operating Costs | $6,504.5$ | 78,055 |

Project product and Price Structure in US \$

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Pdn <br> cost/yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 <br> costs | 115 | 3,002 | 78,055 |
| Profit | 237 | 6,164 | 31,941 |

## Market

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.

## Source of Machinery and Materials

The equipment and machines are specialized and computerized and so they can only be imported. They can be got from USA, China, India, etc. Materials are got from Kenya and some locally.

## Government Facilities

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.

## Trade Sector



## PRODUCTION OF ZINC SULPHATE

## Introduction

Zinc sulphate is a colorless crystalline, water-soluble chemical used to manufacture animal feeds, fertilizers and agricultural sprays. It also has applications in textile dyeing and printing, as a reagent in glues, in electro galvanizing paints, varnishes and in the manufacture of many zinc compounds. Zinc sulphate has a good market potential in rural areas and agriculture sector. The business idea aims at production of $3,900 \mathrm{kgs}$ of zinc sulphate per month. The revenue potential is estimated at US $\$ 374,400$ annually with a net profit margin of $9 \%$ with a payback period of 3 month

The total capital investment for the project is US $\$ 11,622$.

## Plant Capacity

The plant in this profile has a minimum capacity of $46,800 \mathrm{kgs}$ of zinc sulphate per annum.
Capital Investment Requirements

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Pulverizer | No | 1 | 291 | 291 |
| Pumps | No | 10 | 26 | 260 |
| Reaction tank | No | 1 | 147 | 147 |
| Sulphuric acid storage tank | No | 1 | 219 | 219 |
| Discharge and mud recovery <br> tank | No | 1 | 122 | 122 |
| Filter Press | No | 1 | 7,900 | 7900 |
| Crystallizers | No | 1 | 52 | 52 |
| Centrifuge | No | 1 | 1,800 | 1800 |
| Chilling Plant | No | 1 | 831 | 831 |
| Total |  |  |  | 11,622 |

## Production Process

Zinc sulphate is manufactured by leaching zinc ash with dilute sulpuric acid. The leached solution is filtered to separate unreacted zinc, which is reused along with the next charge. The filtrate is treated with potassium permanganate and zinc dust to precipitate impurities

It is then treated with nitro so beta-naphthol to remove cobalt. The excess of sulphuric acid is neutralized with zinc carbonate. The solution is filtered and evaporated. After evaporation, the thick solution is allowed to settle in a settling tank where crystals of zinc sulphate come out of the cooler. The crystals are separated from the mother liquor in a centrifuge and dried on belt drier. The mothe liquor is re-circulated to the evaporator. The crystals are then packed and marketed.

## Production and Operating Expenses

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost// <br> month | Pdn <br> Cost/ <br> Year1 |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct costs3:

| Zinc Ash | Kgs | 8 | 100 | 800 | 20,800 | 249,600 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sulphuric acid | Kgs | 10.5 | 20 | 210 | 5,460 | 65,520 |


| Packaging <br> Materials | Pieces | 2 | 5 | 10 | 260 | 3,120 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtotal |  |  |  |  | 26,520 | 318,240 |

## General costs (Overheads)

| Labour | 400 | 4,800 |
| :--- | :---: | :---: |
| Utilities | 400 | 4,800 |
| Selling and Distribution | 200 | 2,400 |
| Administrative expenses | 150 | 1,800 |
| Shelter | 400 | 4,800 |
| Depreciation (Asset write off) Expenses | 242 | 2,906 |
| Sub-total | 1,792 | 21,506 |
| Total Operating Costs | 28,312 | 339,746 |

1. Production is assumed for 312 days per year
2. Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets
3. A production Month is assumed to have 26 work days

## Project Product Costs and Price Structure

| Item | Qty / <br> day | Qty/yr | @ | Pdn/yr | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Zinc Sulphate | 150 | 46,800 | 7 | 339,746 | 8 | 374,400 |

## Profitability Analysis Table in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :--- | :--- | :--- |
| Revenue | 1,200 | 31,200 | 374,400 |
| Less: Production and Operating <br> Costs | 1,089 | 28,312 | 339,746 |
| Profit | 111 | 2,888 | 34,654 |

## Sources of Supply of Equipments

All equipments can be got in Uganda; however others can be imported from counties like China, USA etc.

## Mining Sector



## SILVER EXTRACTION FROM WASTES

## Introduction

Silver is a very precious and important metal extensively used in photography, X- ray films, jewelry, electrical materials, medicine, etc. In the modern era, silver extraction from waste material has caught the imagination of scientists and engineers. Today, silver is extracted from the waste solution of X -ray clinics, photographers, block makers, and offset printers. Project cost is US $\$ 4,800$ with a production capacity of 45 Kgs per annum and yielding estimated revenues of US $\$ 20,218$ per year.

The project is expected to yield a net profit of margin of $31 \%$ and payback of 2 years and 4 months.

## Production Process, Capacity and Technology

The silver extraction machine has simplified the process of drawing silver from waste. Firstly, the silver concentration is checked on site with the silver estimation paper in grams per litres. Based on the silver estimation, purchase rates are fixed. The waste solution is first filled in the machine, the moment the machine is switched on, and the silver present in the solution gets deposited on the collecting blocks. In a stipulated time, the silver on the collecting blocks is obtained in pure form. Minimum capacity of 45 kg per annum working 26 days in a month.

Capital Investment Requirement in US\$

| Item | Unit | Qty | Price | TC |
| :--- | :---: | :---: | :---: | :---: |
| Silver extraction machine | No | 1 | 4,500 | 4,500 |
| Testing Equipment | No | 1 | 300 | 300 |
| TC of tools \& Equipment |  |  |  | 4,800 |

1. Production costs assumed are for 312 days per year with daily capacity of 0.144 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 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 cost in US\$

Direct Materials, Supplies and costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Fixed solution (photo <br> labs ) | Ltrs | 0.25 | 16.03 | 4 | 104 | 1,250 |
| Testing chemicals | Ltrs | 75 | 0.16 | 12 | 312 | 3,744 |
| Packing material |  | 1.5 | 0.64 | 0.96 | 24.96 | 300 |
| Sub-total |  |  |  | 17 | 441 | 5,294 |

## General Costs (Overheads)

| Labour | 150 | 1,800 |
| :--- | :---: | :---: |
| Selling \& distribution | 100 | 1,200 |
| Utilities (Water, power) | 200 | 2,400 |
| Rent | 75 | 900 |
| Miscellaneous expenses | 100 | 1,200 |
| Depreciation | 100 | 1,200 |
| Sub-total | 725 | 8,700 |
| Total Operating Costs | 1,166 | 13,994 |

Project product costs and Prices Structure in US\$

| Item | Qty/ <br> day | Qty/ <br> yr | Unit <br> cost | Pdn <br> cost/yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Silver | 0.14 | 45 | 312 | 13,994 | 450 | 20,218 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :--- | :--- | :--- |
| Revenue | 64.8 | 1,685 | 20,218 |
| Less: Production and operating <br> costs | 44.85 | 1,166 | 13,994 |
| Profit | 19.95 | 519 | 6,224 |

## Market

Silver can be sold anywhere at around $\$ 250$ per kg . This is very promising as the raw materials could even be got for free as waste and the potential for exporting is high.

## Source of Machinery and Materials

The equipment and machines can be imported from India; meanwhile raw materials can be got locally from the photo studios, clinics and hospital labs.

## Government Facilities

Startup costs up to $25 \%$ granted on actual cost over the first four years in four equal installments.

## Risk

Wear and tear machinery however this can be mitigated through proper maintenance.

## Mining Sector



BRICK MAKING FROM BLACK SOIL

## Introduction

This business idea is for production and marketing of bricks at a small scale investment. This business idea aims at production of 90,000 bricks per month, which translates into 1,080,000 bricks per year. The revenue potential is estimated at US $\$ 4,501$ per month translating into US\$54,007 per year with a sales margin of $10 \%$ and total investment capital is US\$531,615 for the first year.

## Production Capacity

It is analyzed that more than 3,000 bricks can be made per day depending on the equipments being used. The company can have a production capacity of more than 80,000 fired bricks and 10,000 unfired per month (Hoffman kilns can fire 80,000 bricks).

## Technology and Process Description

The clay brick making technology is simple as it requires less skilled manpower and local materials mixture. The production process starts with the raw clay, preferably in a mix with $25-30 \%$ siliceous stone dust to reduce shrinkage. The clay is first ground and mixed
with water to the desired consistency. The clay is then pressed into wooden moulds and pressed into preferred cube shape. The cubes are left to dry slowly while covered with banana leaves, grass or plastic sheets to avoid cracking which lowers quality. The dried bricks are then fired ("burned") at 900-1000 ${ }^{\circ} \mathrm{C}$ to achieve strength.

## Scale of Investment (Capital Requirements, Equipment \& machinery)

The investment scale depends on the production capacity and demand. The following tools and equipments can be used:

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Wooden moulds | No | 3 | 5 | 15 |
| Hoes | No | 4 | 3.6 | 14.4 |
| Jerry cans | No | 5 | 2 | 10 |
| Spades | No | 3 | 5 | 15 |
| Wheel barrow | No | 3 | 28 | 84 |
| Delivery truck | No | 1 | 9,000 | 9,000 |
| Total |  | 19 | 9,040 | 9,138 |

## Production and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Clay | trips | 25 | 4 | 100 | 2600 | 31200 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Grass | Bundles | 0.1 | 10 | 1 | 26 | 312 |
| Ash \& Siliceous <br> stones | trips | 12.5 | 1 | 12.5 | 325 | 3900 |
| Sub-total |  |  | 15 | 114 | 2951 | 35412 |

## General Costs(Overheads)

| Utilities(Firewood \& Water) | 32 | 384 |
| :--- | :---: | :---: |
| Labour | 425 | 5100 |
| Rent | 250 | 3000 |


| Other Costs | 150 | 1800 |
| :--- | :---: | :---: |
| Depreciation(Asset write off)Exp | 190 | 2,282 |
| Sub-Total | 1047 | 12,566 |
| Total Operating Costs | 3,998 | 47,978 |

1. Production costs assumed are for 312 days per year with a daily capacity of 3,462 bricks.
2. Depreciation (fixed asset write off) assumes a 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 Structures in US\$

| Item | Qty/day | Qty/Yr | @ | Pdn/ Yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Bricks | 3,462 | $1,080,144$ | 0.04 | 43,206 | 0.05 | 54,007 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 173 | 4,501 | 54,007 |
| Less: Prdn \& Operating Costs | 154 | 3,998 | 47,978 |
| Profit | 19 | 502 | 6,030 |

## Market Analysis

With the growing construction projects in urban and rural areas, the market base for the bricks is wide.

## Sources of supply of raw materials

Raw materials are available locally.

## Government facilities \& incentives available

The Government supports or encourages the formation of Associations in different sectors. These can act as pressure groups to smoothen operations and influence government policies. Uganda Investment Authority is also set up to promote and facilitate the potential investors.

## Mining Sector



MAKING LOW DUST CHALK

## Introduction

This business idea is for production and marketing of low dust chalk. Chalk is a soft compacted whitish calcite used as a writing aid in educational institutions. Low dust chalk reduces health hazards that result from excess chalk dust. The market structure for chalk cuts across academic institutions. It can be produced in a wide range of colours though white chalk is most preferred. The business idea aims at production of 3,900 boxes of chalk per month. The revenue potential is estimated at US $\$ 655,200$ per year with a sales margin of $10 \%$; the total capital investment for the project is US\$2,588.

## Production capacity

The profiled plant has a minimum capacity of 150 boxes of chalk per day and each box normally has 100 chalk pieces.

## Production Process

To produce chalk, Plaster of Paris, French chalk and kaolin are mixed and made in a form of paste. The paste is cast in a suitable mould and dried. The dried material is then neatly packed for the market.

## Capital Investment Requirements

| Capital Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Oven | No | 1 | 638 | 638 |
| Moulds | No | 10 | 100 | 1000 |
| Vessels | No | 10 | 95 | 950 |
| Total |  |  |  | 2,588 |

## Production and Operating Expenses

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn Cost/ <br> Year1 |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct costs3:

| Plaster of <br> Paris | Bags | 23 | 50 | 1,150 | 29,900 | 358,800 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| French <br> Chalk | Kgs | 20 | 15 | 300 | 7,800 | 93,600 |
| Kaolin | Kgs | 15 | 10 | 150 | 3,900 | 46,800 |
| Binder | Kgs | 20 | 10 | 200 | 5,200 | 62,400 |
| Packaging <br> materials | Pieces | 0.15 | 100 | 15 | 390 | 4,680 |
| Subtotal |  |  |  |  | 47,190 | 566,280 |

## General costs (Overheads)

| Labour | 300 | 3,600 |
| :--- | :---: | :---: |
| Utilities | 200 | 2,400 |
| Selling and Distribution | 100 | 1,200 |
| Administrative expenses | 100 | 1,200 |
| Shelter | 100 | 1,200 |
| Depreciation (Asset write off) Expenses | 54 | 647 |
| Sub-total | 854 | 10247 |
| Total Operating Costs | 48,044 | 576,527 |

1. Production is assumed for 312 days per year.
2. Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
3. A production Month is assumed to have 26 work days.

Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | Unit <br> cost | Pdn/yr | Unit <br> cost | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chalk boxes | 150 | 46,800 | 12.32 | 576,527 | 14 | 655,200 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 2,100 | 54,600 | 655,200 |
| Less: Production and Operating <br> Costs | 1,848 | 48,044 | 576,527 |
| Profit | 252 | 6,556 | 78,673 |

## Sources of Supply of Equipments

All materials needed can be got locally at fair Prices.

## Government Incentives

The Government has liberalized the economy and encouraged people to invest in industrial set up through incentives like low tax rates and deferred tax payments.

## Mining Sector



## MAKING POTTERY PRODUCTS

## Introduction

This business idea is for production and marketing of pottery products on a small scale investment. Pottery is the process of mixing clay with water; and shaping the mixture into pottery products/Pottery ware such as: pots, cups, plates, bowls, urns and candleholders. The market structure and demand for pottery products is generally wide because they are sold in places like curio shops, Art Kiosks and other places. They are used for various purposes such as: decorations, flower vases in workplaces, schools, lodges and households; while some products can be exported. The business idea aims at production of 104 pottery products per month which translates into 1,248 pottery products per year. The revenue potential is estimated at US $\$ 1,560$ per month, translating into US $\$ 18,720$ per year with a sales margin of $5 \%$ and total investment capital of US\$9,141 for the first year of project operation.

## Production Capacity

The production capacity depends on the intended number of products a manufacturer is willing and able to make, their sizes and the quantity of raw materials used in the production process. In this case, the TC of this project is US\$ 526 .

## Technology and Process Description

The technology used is relatively simple as it involves modeling red clay by use of hands, shaping tools and paint for decorating. Pottery is the process of mixing clay with water; and shaping the mixture into pottery wares. The modeled objects are then exposed to heat to dry then put in a kiln for burning to get the final product.

## Scale of Investment, Capital Investment Requirements and Equipment

The scale of investment generally depends on the interests of the manufacturer and the demand for the products.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Basins | No | 4 | 2 | 8 |
| Hoes | No | 4 | 2.5 | 10 |
| Kiln | No | 1 | 200 | 200 |
| Medium Working table | No | 2 | 150 | 300 |
| Jerry cans | No | 4 | 2 | 8 |
| Total |  |  |  | 526 |

## Production and Operating Costs

Direct Materials, Supplies and Costs in US\$

| + | Units | @ | Qty/ <br> day | cost/ <br> day | cost/ <br> month | cost/ <br> year |
| :---: | :--- | :--- | :--- | :---: | :---: | :---: |

## Direct Costs

| Red Clay | kg | 0.2 | 40 | 8 | 208 | 2,496 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Grass | Bundle | 0.3 | 10 | 3 | 78 | 936 |
| Water | Liter | 0.003 | 10 | 0.03 | 0.78 | 9.36 |
| Sand <br> particles | kg | 0.3 | 10 | 3 | 78 | 936 |
| Sub-total |  |  | 70 | 14 | 364.8 | $4,377.4$ |

## General Costs(Overheads)

| Labour | 200 | 2400 |
| :--- | :---: | :---: |
| Utility (Firewood) | 50 | 600 |
| Oil paint | 40 | 480 |
| Transport | 50 | 600 |
| Miscellaneous costs | 50 | 600 |
| Depreciation(Asset write off) Expenses | 7 | 84 |
| Sub-total | 397 | 4,764 |
| Total Operating Costs | 761.8 | $9,141.4$ |

1. Production costs assumed are for 312 days per year with a daily capacity of 4 big pots but the business unit can also make other pottery products in different sizes and shapes.
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.

Product Cost and Price Structure in US\$

| Item | Qty/day | Qty/Yr | @ | Pdn cost/ Yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| pots | 4 | 1,248 | 8 | 9,986 | 15 | 18,720 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 60 | 1,560 | 18,720 |
| Less: Production and Operating <br> Costs | 29.29936 | 761.8 | 9,141 |
| Profit | 30.7 | 798.2 | 9,579 |

## Market Analysis

The Market for pottery products is wide since they are
multipurpose and the products can be sold for many different users.

## Source of Supply of Machinery, Equipments and Raw

## Materials

Both the raw materials and machinery are readily available on the local market.

## Mining Sector



## MAKING CLAY PIPES

## Introduction:

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.

## Capital Investment Requirement in US \$

| Item | Units | Qty | Price | Total |
| :--- | :---: | :---: | :---: | :---: |
| Vertical clay pipe making <br> machine | No | 1 | 500 | 500 |
| Firing Kiln | No | 1 | 2500 | 2500 |
| TC of tools |  |  |  | 3000 |

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


## Direct Costs

| Plastic clay | Kgms | 0.01 | 75 | 0.75 | 19.5 | 1.63 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Fuel | Litres | 1.6 | 20 | 32 | 832 | 9,984 |
| Sub-total |  |  | - |  | 852 | 9,986 |

## General Costs (Overheads)

| 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 |
| Sub Total | 1,317 | 16,530 |
| Total Operation | $2,168.50$ | 26,516 |

Project Product costs and Price structures in US\$

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Pdn cost/ <br> yr(\$) | UPx | TR(\$) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 <br> costs | 24 | 636 | 16,530 |
| Profit | 114 | 2,972 | 26,760 |

## Market

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.

## Source of machinery and Materials

These could be locally fabricated and constructed. Tonet Ltd Kanyanya, Gayaza Rd, John Lugendo and co Ltd, Ndeeba Masaka Rd, and Tree Shade Ltd Mwanga II Rd -Kisenyi Kampala can be contacted. Clay can be got from all over the country from the sand and clay mining sites.

## Government incentive

Start up costs $25 \%$ granted on actual cost over the first four years in four equal installments.

## Mining Sector



## 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 $15,000 \mathrm{~kg}$ 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 $15,000 \mathrm{~kg}$ per annum but output can be increased tremendously when a grip on the market has been made.

## Capital investment Requirement in US \$

| Capital Investment Item | Units | Qty | @ |
| :--- | :---: | :---: | :---: |
| Oil fired tilting furnace | No | 1 | 1,000 |
| Weighing balance | No | 2 | 30 |
| ladle \& tongs | No | 2 | 15 |
| Hand moulding equipment | No | 1 | 1,200 |
| Bench grinder | No | 1 | 80 |
| Mixing Machine | No | 1 | 500 |
| TC of Machinery \& Tools |  |  |  |

1. Production costs assume 312 days per year with daily capacity of 48.1 Kgs .
2. Depreciation (fixed asset write off) assumes a 4 year life of assets written off at $25 \%$ per
3. year for all assets
4. Direct costs include materials, supplies and all other costs incurred to produce the product.
5. A production month is 26 days and Currency used is US Dollars.

## Production and Operation costs in US \$

(a) Direct materials, supplies and costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Copper \& Zinc | kgs | 1 | 32 | 32 | 833 | 10,000 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Mould release <br> agent | Itrs | 6 | 0.16 | 1.0 | 25 | 300 |
| Other reagents | Itrs | 1.25 | 1.00 | 1.3 | 33 | 390 |
| Packaging material | pkts | 2 | 3.21 | 6.4 | 167 | 2,000 |
| Sub-total |  |  |  | 41 | 1,058 | 12,690 |

## General Costs (Overheads)

| 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 |
| Sub-total | 1,945 | 23,345 |
| Total Operating Costs | 3002.9 | 36,035 |

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

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Pdn <br> cost/ <br> yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Brass \& Bronze <br> 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 \&operating <br> costs | 115 | 3,003 | 36,035 |
| Profit | 29 | 747 | 8,959 |

## Market

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.

## 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

Startup costs $25 \%$ granted on actual cost over the first four years in four equal installments.

## Mining Sector



## CEMENT BRICK MAKING

## Introduction

Bricks are the basic requirement for any construction activity. They are prepared with the help of mud, clay or cement. Bricks made of cement are hallow and solid hence the great acceptance in the market because of their strength. For such an investment, one needs to have at least a small piece of land of about $1 / 2$ Acre that can be either rented or owned. The idea envisaged is for production of 52,000 blocks per month and 624,000 per year. The revenue potential is estimated US $\$ 218,400$ per year with total investment of US $\$ 12,011$.

## Process description and production capacity

Cement, sand, stone chips, stone dust and rods are mixed in suitable proportions along with water. This concrete mix is placed in metal or wood moulds. For reinforcement, wire mesh or rods are placed between successive layers of Concrete mix and compacted by vibration. The cast items are kept for a day to set. Then they are cured in a water tank for 15 days for complete setting.

## Capital Investment Requirements

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Cement Block making Machine | No. | 1 | 2700 | 2700 |
| Cement mixing machine | No. | 1 | 2200 | 2200 |
| Coffee tray | No. | 1 | 7 | 7 |
| Vibrator | No. | 1 | 1500 | 1500 |
| Moulds | No. | 4 | 439 | 1756 |
| Wheel barrows | No. | 6 | 30 | 180 |
| Total cost on machinery |  |  | 6876 | 8343 |

## Production and Operating Costs

| Cost Item | Units | @ | Qty/day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cement | kg | 0.03 | 500 | 15 | 390 | 4,680 |
| Stone dust | Tones | 75 | 1.5 | 112.5 | 2,925 | 35,100 |
| Sand | Tones | 50 | 4 | 200 | 5,200 | 62,400 |
| Sub-total |  |  | 506 | 327.5 | 8,515 | 102,180 |

## General costs(overheads)

| Utilities(water and power) | 300 | 3,600 |
| :--- | :---: | :---: |
| Labour | 1,300 | 15,600 |
| Rent | 250 | 3,000 |
| Miscellaneous costs | 50 | 600 |
| Administration expenses | 300 | 3,600 |
| Repairs and maintenance | 100 | 1,200 |
| Depreciation(Asset write off)Expenses) | 302 | 3,624 |
| Sub -total | 2,602 | 31,224 |
| Total Operating Costs | 11,117 | 133,404 |

This business idea is premised on production of 2000 blocks per day. A producer needs 1000 kg of cement, 300 kg of stone dust and $8,000 \mathrm{~kg}$ of sand that adds up to $6,000 \mathrm{~kg}$ per day.
$1 / 2$ an acre of in one of the kampala suburbs would cost over US $\$ 3668$
Ratio=1:3:8, that is cement, stone dust and sand respectively (kg) and each dried block weighs 6 kg

## Project Product Costs and Price in US \$

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> cost / <br> yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cement bricks | 2,000 | 624,000 | 0.4 | 249,600 | 0.7 | 174,720 |
| Total |  | 312,000 |  |  |  | 218,400 |

## Profitability Analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 700 | 18,200 | 218,400 |
| Less production and <br> operating Costs | 428 | 11,117 | 133,404 |
| Profit | 272 | 7,083 | 84,996 |

## Market Analysis

The demand for cement bricks is high in construction and housing companies.

## Sources of Raw Materials and Equipments

Raw materials can be locally sourced and equipments can be bought from IMER group found in Industrial Area 6th street plot No. 108 -Kampala.

## Government facilities and incentives available

In a bid to boost the construction sector, the government of Uganda has reduced taxes on all Construction materials.

## Social Sector



## VIDEO FILMING

## Introduction

The moving images have almost replaced the conventional still photographs with people opting for films of social gatherings, religious, political and marriage functions, etc. The technological advancement has brought the video close to people, which has led to tremendous growth of video studios centers even in small towns and villages. The project cost isUS $\$ 199,632$ and estimated annual revenue is US $\$ 468,000$.

## Production Process, Capacity and Technology

The operating process involves simple steps. However, much depends upon the skill and acumen of the person handling the camera. Equipment; Video Recording Equipment is bought and put in place. Trained and specialized cameramen take the positions of manning this equipment. It is not easily quantifiable as this depends on a number of factors including the quality of the recordings being given out, the charges, etc

## Capital Investment Requirement in US \$

| Item | Units | Qty | Price | TC |
| :--- | :---: | :---: | :---: | :---: |
| VHS/SVHS Video camera | No | 1 | 600 | 600 |
| Lighting | No | 2 | 200 | 400 |
| External microphones | No | 2 | 80 | 160 |
| Computers | No | 1 | 500 | 500 |
| Computer soft ware | No | 1 | 40 | 40 |
| Labeling machine | No | 1 | 300 | 300 |
| Camera accessories | No | 1 | 200 | 200 |
| CD burning and recording <br> deck | No | 1 | 150 | 150 |
| Editing Gadgets | No | 1 | 250 | 250 |
| Other Equipment | No | 1 | 400 | 400 |
| TC of tools \& Equipment |  |  |  | 3,000 |

1. Production costs assume 312 days per year with daily capacity of 2 video coverage.
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 \$

## Direct Materials, Supplies and costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| VHS/SVHS Video <br> tapes | No | 12 | 24 | 288 | 7,488 | 89,856 |
| VHS/SVHS Video CDs | No | 10 | 0.2 | 2 | 52 | 624 |
| Batteries | No | 4 | 0.5 | 2 | 52 | 624 |
| Chemicals solutions <br> for developing | Liters | 50 | 1 | 2 | 7,644 | 91,728 |
| Sub-total |  |  |  | 294 | 15236 | 182832 |

## General Costs (Overheads

|  | Pdn cost/ <br> day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :--- | :---: | :---: | :---: |
| Labour | 27 | 700 | 8,400 |
| Selling \& distribution | 8 | 200 | 2,400 |
| Utilities (Water, power) | 4 | 100 | 1,200 |
| Rent | 4 | 100 | 1,200 |
| Miscellaneous expenses | 8 | 200 | 2,400 |
| Depreciation | 4 | 100 | 1,200 |
| Sub-total | 54 | 1400 | 16800 |
| Total Operating Costs |  | 63616, | 199,632 |

Project product costs and Price Structure in \$

| Item | Qty/ <br> day | Qty/ <br> year | @ | Pdn <br> cost/yr | UPx | TR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Videos, Films, <br> Movies etc | 5 | 1560 | 150 | 234,000 | 300 | 468,000 |

Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 1500 | 39,000 | 468,000 |
| Less: Production and operating <br> costs | 640 | 16,636 | 199,632 |
| Profit | 860 | 22,364 | 268,368 |

## Market

The use of electronic media has created a favorable climate for filming of all programmes and events among all sections of people in the society. This can be done to generate higher incomes even in rural areas. Advertising is needed for this project to quickly pick up demand.

## Suppliers of Equipment

The equipment is available on the Ugandan markets, Photogenic can provide it.

## Government Incentives

Start up costs $25 \%$ granted on actual cost over the first four year in four equal installments.

## Social Sector



## STARTING AN ONLINE MUSIC AND BOOKSTORE

## Introduction

This is about setting up an online music and book store. Books and music will be sold in hard or digital downloadable versions. Clients will access the store, place orders and make payments online. The project cost is estimated at US\$ 7,500 per year with a working Capital of USD 18,956 covering about 2months operational cost. This yields total revenue of US $\$ 309,192$ for the first year of operation. The business has a payback period of 2 years and a net profit margin of $24 \%$. The Sales of the business grows gradually with the aid of repetitive buyers, referrals and other loyal customers. It is a business that does not need one to be present in any selling points thus you can operate from wherever you are. The investment can be scaled in accordance with the Capital available.

## Process Description and system Production Capacity

 Online book and music stores are an established and proven business model currently globally dominated by Amazon. The internet has entered many households in Uganda and across the world.A website is set up with a well programmed data base having encryptions of upgrade of new products in the system. The data base is expected to carry $50,000,000 \mathrm{~GB}$ capacity with 200 copies of books and music sold daily which translates into 62,400 copies respectively. Different textbooks are bought and listed on the business sight for different people to view and if interested, they register to buy online

The service charges are then paid by means of credit card facility ie Visa or Master card through an international or global bank such as Barclays.

## Capital investment requirements in US\$

| Capital Item | Qty | Unit Cost | Amount |
| :--- | :---: | :---: | :---: |
| Desktop Computer | 2 | 650 | 1300 |
| Laptop | 1 | 500 | 500 |
| Website |  | 5000 | 5000 |
| Internet Installation |  | 200 | 200 |
| Furniture \& Fittings |  | 300 | 300 |
| Business bank account |  | 200 | 200 |
| Total |  |  | 7500 |

## Production and Operation Costs in US\$

| Cost Item | Unit <br> cost | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost/ <br> month | Pdn <br> Cost/yr |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct costs3: |  |  |  |  |  |  |
| Books (New) Novels | 8 | 40 | 320 | 8320 | 99840 |  |
| Books (Old) Novels | 1.61 | 50 | 80.5 | 2093 | 25116 |  |
| Text books | 15 | 20 | 300 | 7800 | 93600 |  |
| Music Singles and <br> movies | 0.12 | 180 | 21.6 | 561.6 | 6739.2 |  |
| Empty CDs | 0.19 | 0.24 | 0.0456 | 1.1856 | 14.2272 |  |
| Subtotal |  |  |  | 18776 | 225,309 |  |

## General costs (Overheads)

| Labour | 50 | 600 |
| :--- | :--- | :--- |
| Internet Charges | 50 | 600 |


| Administrative expenses (Calls, postage, etc) | 50 | 600 |
| :--- | :---: | :---: |
| Others | 30 | 360 |
| Sub-total | 180 | 2,160 |
| Total Operating Costs | 18,956 | 228,195 |

1. Total monthly days assumed are 26 -days.
2. Production costs assumed 312 days per yea

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

| Item | Qty/ <br> day | Qty/yr | Unit <br> Cost | Unit <br> price | Total <br> cost/yr | Total <br> Revenue |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Books (New) <br> Novels | 40 | 12480 | 8 | 10 | 100,565 | 124,800 |
| Books (Old) | 50 | 15600 | 2 | 3.5 | 25,841 | 54,600 |
| Text books (New) | 20 | 6240 | 15 | 19 | 94,325 | 118,560 |
| Music Singles and <br> movies | 180 | 56160 | 0.09 | 0.2 | 7,464 | 11,232 |
| TOTAL |  |  |  |  | 228,195 | 309,192 |

Profitability Analysis Table

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 991 | 25,766 | 309,192 |
| Less: Production and Operating <br> Costs | 729 | 18,956 | 228,195 |
| Profits | 262 | 6,810 | 81,723 |

## Market analysis

There is a ready market of 120 m English speaking people in the East African Community area. There is limited access to books across the region. This will be a good business opportunity that will exploit this gap. Orders can be placed and paid for online from any part of the region and fulfilled via post parcels.

## Sources of materials

Books can be obtained from publishers such as Penguin. Music can be obtained from Music production and distribution companies such as Sony. Both are available in print hard copy of Digital versions

## Social Sector



## PROJECT FOR MAKING A BUSINESS CALL CENTRE

## Introduction

A business call centre is a place that has adequate telephone facilities, trained consultants, access to wide data bases, internet and other on-line support infrastructure so as to provide information and support to customers on a retail time basis. A customer today is able to place an order on the internet, do sale and purchase transactions, make payments, order for loans, and also download digitized products e.g. music. Setting up a call centre basically offers services like web integration, automatic call distribution, interactive voice response, predictive dialer, screen pop-up capabilities, and management features.

## Technology

A call centre involves efficient integration and management of telecom and IT infrastructure. The essential components of a call centre are: premises, Leased circuit/communication connectivity, Data compression and decompression equipment, Computer telephony integration, Voice enabled PCs connected to high performance servers, Voice over the internet protocol, Predictive dialer, Interactive voice response and automatic call distributors.

## Capital Investments Requirements in US \$

| Capital Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Computers | No |  |  | 5,850 |
| Lease circuit \&modems | No |  |  | 2,000 |
| Server | No | 1 | 2500 | 2,500 |
| Dialogic phone sets, headsets, | No |  |  | 1,000 |
| Data compression equipment | No |  |  | 1,000 |
| Pop up screens | No |  |  | 250 |
| UPS, printers | No |  |  | 1,000 |
| Office equipment | No |  |  | 640 |
| Electricals | No |  |  | 500 |
| Generator (5 KVA) | No |  |  | 505 |
| Air conditioners | No |  |  | 900 |
| Telephone and fax | No |  |  | 350 |
| Total |  |  |  | 16,495 |

Production and Operating Costs in US\$

| Cost Item | Units | @ | Qty/ <br> mth | Pdn <br> Cost/mth | Pdn Cost/ <br> Year1 |
| :---: | :--- | :--- | :--- | :--- | :---: |

## Direct costs3:

| Paper | Reams | 25 | 5 | 125 | 1,500 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Pens | Boxes | 5 | 2 | 10 | 120 |
| Floppies | No |  |  | 300 | 3,600 |
| Other Consumables | No |  |  | 200 | 2,400 |
| Subtotal |  |  |  | 635 | 7,620 |

## General costs (Overheads)

| Salary \& wages | 1,900 | 22,800 |
| :--- | :---: | :---: |
| Utilities and overheads | 170 | 2,040 |
| Postage, telephone | 65 | 780 |
| Transportation, conveyance | 100 | 1,200 |
| Repairs and maintenance | 100 | 1,200 |
| Adverts and publicity | 430 | 5,160 |
| Internet connection charges | 50 | 600 |
| Shelter (rented) | 750 | 9,000 |


| Miscellaneous | 40 | 480 |
| :--- | :---: | :---: |
| Depreciation (Asset write off) Expenses | 4123.75 | 4,124 |
| Sub-total | 3,949 | 47,384 |
| Total Operating Costs | 4,584 | 55,004 |

1. Production is assumed for 312 days per year
2. Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets
3. A production Month is assumed to have 26 days.

Project product Costs and Price Structure

| Service | Sv/day | Sv/Year | Service <br> cost | Service <br> charge | TR |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Call centre | 2 | 624 | 88.15 | 105 | 65,520 |
| TOTAL |  | 624 |  |  | 65,520 |

## Profitability Analysis Table

| Profitability Item | Per Month | Per Year |
| :--- | :--- | :--- |
| Revenue | 5,460 | 65,520 |
| Less: Production and Operating Costs | 4,584 | 55,004 |
| Profit | 876 | 10,516 |

## Market Analysis

The market potential for call centers includes people and industries that require customer interface, private businessmen, airlines, financial services groups (banks, insurance firms, etc.), telecommunication service groups, ICT companies, Hospitals, hotels, tourism and travel firms, large manufacturing firms and other service industries.

## Government facilities and incentives

The communications sector was liberalized through setting up the communications commission that eases and facilitates any setup in this sector.

## Social Sector



## 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 detergents. It is often used instead of hand washing delicate fabrics, which can be excessively laborious.
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 year of operation is estimated at USD 26,913 and the TR is estimated at USD 73,000 for the first year of project operation

The payback for this idea $40 \%$ and the pay is at most 3 years and 6 months.

## 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.

## Costs

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @\$ | Amount \$ |
| :--- | :---: | :---: | :---: | :---: |
| Delivery Van | No. | 1 | 26,000 | 26,000 |
| Dry Cleaning Machine | No. | 1 | 640 | 640 |
| Flat Iron | No. | 1 | 55 | 55 |
| Garment Bags | No. | 20 | 7 | 140 |
| Ironing Board | No. | 1 | 15 | 15 |
| Cloth Hangers | No. | 50 | 0.25 | 13 |
| Office Chair | No. | 1 | 50 | 50 |
| Total Amount |  |  |  | 26,913 |

## Operating Costs in US\$

| Item | Units | @ | Qty/ <br> day | Prod. <br> cost/day | Prod. Cost/ <br> month | Prod. <br> Cost/ Year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Water | Ltrs | 0.001 | 800 | 1 | 24 | 288 |
| Detergents | Ltrs | 5 | 10 | 50 | 1,500 | 18,000 |
| Sub total |  |  |  | 50.8 | 1,524 | 18,288 |

## General Costs (Over heads)

| 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 | 561 | 6,728 |
| Sub - total | 1,961 | 23,528 |
| Total Operating Costs | 3,485 | 41,816 |

Project Product Costs \& Price Structure

| Item | Qty/day | Qty/yr | @\$ | Pdn Cost/ <br> yr\$ | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Clods | 100 | 36,500 | 1.15 | 41,816 | 2 | 73,000 |

## Profitability Analysis

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 200 | 6,083 | 73,000 |
| Less: Production \& Operating Costs | 115 | 3,485 | 41,816 |
| Profit | 85 | 2,598 | 31,184 |
|  |  |  |  |

## Market Analysis

The demand for dry cleaning services is very high in the City and busy Urban \& Trading Centres.

## Source of Supply of Raw materials:

Tetrachloroethylene will be sourced locally in Super markets and Chemical Shops in Uganda.

## Government Facilities and Incentives Available

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

## Risk

The business involved with this idea is risks of breakdown in machinery. This is can be solved by repairing equipments or replacements.

## Social Sector

## REFRIGERATION SERVICE

## Introduction:

Refrigeration is the process of removing heat from an enclosed space, or from a substance and moving it to a place where it is unobjectionable. The primary purpose of refrigeration is lowering the temperature of the enclosed space or substance and then maintaining that lower temperature. The profile is for setting up of a service center to do repairs on fridges, installation and maintenance of cold rooms, freezers and cold rooms, glass fronted display rooms and air conditioning. This would require specialization in installation and maintenance of air conditioning for transport, industry, offices and homes, cold rooms and refrigeration for transport. The total project would cost US\$29,084 serving 624 units per annum. This would yield estimated revenue of US\$ 24,336 annually. The payback period for this idea is 2years and the net profit is estimated at $3 \%$.

Production Process and Capital Investment Requirement Servicing largely depends on the problems to be rectified. However, the process involves, inspecting the refrigerator, testing, replacing and rectifying the problem with minor repairs carried out on the spot at the customer's place. Only in case of major repairs, the refrigerator has to be lugged to the nearest servicing Centre. The profiled service center has a minimum capacity of servicing 600 units per annum. With increased awareness on the role of refrigeration, the demand for the service center is bound to go up and more refrigerators will be serviced

## Capital Investment Requirement in US \$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| vacuum Pump | No | 3 | 212 | 636 |
| Blower | No | 2 | 42.9 | 85.8 |
| Drilling Machine | No | 2 | 25 | 50 |
| Pressure Pump | No | 2 | 110 | 220 |
| Fridge Cylinder | No | 3 | 30 | 90 |
| Testing tools eg multimeter, <br> ammeter | No | 3 | 10 | 30 |
| Hand tools, tinkering tools, <br> flaring tools | No | 3 | 15 | 45 |
| Blower lamp \& other <br> miscellaneous | No | 2 | 250 | 500 |
| Office furniture and work tables | No | 1 | 500 | 500 |
| Electrical works | No | 1 | 200 | 200 |
| Tube filling machine | No | 2 | 150 | 300 |
| TC of tools |  |  |  | 5400 |

1. Production costs assume 312 days per year with daily capacity of 2 Fridges.
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

## Currency used is US Dollars.

## Production and Operating costs in US \$

Production and Operating costs in US S

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost// <br> day | Pdn <br> cost/ <br> mth | Pdn <br> cost/ <br> yr |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Freezing Material | Kgs/ <br> pkts | 4 | 1.60 | 6.4 | 167 | 2,000 |
| Copper pipes | Kgs// <br> pkts | 7.5 | 0.32 | 2.4 | 63 | 750 |
| Fasteners \& Glue | kgs/ <br> Itres | 12.5 | 0.4 | 5 | 125 | 1,500 |


| Mini spares like <br> relays \& other <br> consumables | Kgs/ <br> pkts | 2 | 1 | 2. | 52 | 624 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sub-total |  |  |  | 16 | 406.2 | 4,874 |

## General Costs (Overheads)

| Labour | 655 | 7,860 |
| :--- | :---: | :---: |
| Selling \& distribution | 250 | 3,000 |
| Utilities (Water, power) | 250 | 3,000 |
| Rent | 200 | 2,400 |
| Miscellaneous expenses | 100 | 1,200 |
| Depreciation | 113 | 1,350 |
| Sub-total | 1,568 | 18,810 |
| Total Operating Costs | 1,974 | 23,684 |

Project product costs and Price Structure in US\$

| Item | Qty/day | Qty/yr | @ | Pdn cost/yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Repair services | 2 | 624 | 38 | 23,684 | 39 | 24,336 |

## Profitability Analysis in US \$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 78 | 2,028 | 24,336 |
| Less: Production and operating costs | 76 | 1,974 | 23,684 |
| Profit | 2 | 54 | 652 |

## Market

With the growing base of consumers for refrigerators and coolers, there is latent demand to locally set up service centers in rural areas. Individuals will be buying new electrical appliances as government is putting a ban on used electrical appliances and when need for repairs come, people want perfect service providers.

## Supply of equipment

Most equipment like new refrigerators will be imported and other tools got from the local market.

## Government incentive

The government policy to ban importation of used refrigerators will force users to invest in durable fridges and thus the need for maintenance and supply services.

## Social Sector



## ROOF CLEANING SERVICES

## Introduction

The algae, dust, decomposed leaves and rust and smoke have made many roofs of houses to look "older than the actual age of the house". They do accelerate the depreciation process of the buildings.

This project idea is developed after realizing the opportunities that exist in the cleaning service sector. An estimated total operating cost amounting to $63,505 \mathrm{US} \$$, when injected in the project can realize revenue of 99,840 US $\$$ in the first year of operation. The estimated fixed capital is 11,432 US $\$$.

## Process of Offering the Service

The process of offering the service involves mixing cleaning detergents,water,scrubbing tools, dust blowers all combined to wash the roof top. Where painting is needed, spray paint can be sprayed on the top or if it is cleaning, then cleaning oil is applied after washing.

Investment Scale, Capital Requirements \& Equipment

The capital requirements depend on the investment scale portfolio of the project. The equipment tabled below can be used for a good start of the project.

## Capital Investment Requirements in US\$

Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | $@$ |
| :--- | :---: | :---: | :---: |
| Spray painting machine | No | 2 | 450 |
| Tile cleaning machine | No | 2 | 600 |
| Dust blowers | No | 2 | 140 |
| Detergent mixer | No | 2 | 500 |
| Furniture \& Fixtures | No | - | - |
| Service Vehicle | No | 1 | 6000 |
| Hand brushes | No | 10 | 1.2 |
| Wipers | No | 2 | 200 |
| Sand paper | No | - | - |
| Climbing ladders | No | 2 | 100 |

## Production and Operating Costs in US $\mathbf{\$}$

| Cost Item | Units | @ | Qty/day | Pdn cost/mth |
| :--- | :--- | :--- | :--- | :--- |
| Direct Costs |  |  |  |  |
| Colour paint | Tns | 20 | 2 | 1092 |
| Spray paint | Tns | 25 | 2 | 1,300 |
| Cleaning oil \& detergents | Ltre | - | - | 438 |
| Water | Ltrs | - | - | 125 |
| Sub-total |  |  | - | 2,955 |

## General Costs (Overheads)

| Gloves | 29 |
| :--- | :---: |
| Labor | 1,480 |
| Utilities | 70 |
| Fuel | 200 |
| Administration expenses | 196 |
| Miscellaneous expenses | 102 |
| Depreciation | 238.16 |
| Sub-total | 2,338 |
| Total Operating Costs | 5,293 |

1) Production costs assumed 312 days per year with daily cleaning of 2 building roofs.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

## Market Analysis

The market for cleaning services widely exists as most of the houses these days are made of tiles plus colored iron sheet roofs that need repainting .Getting tenders for cleaning housing estates can be a very profitable venture as most suburbs of city are now turning into estates.

Production costs and Price structure in US\$

| Service | Rfs-cl/ <br> day | Rfss- <br> cl/yr | Rf-cl <br> cost | Total <br> cl-cost/ <br> yr | Serv- <br> charge | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Roof Cleaning | 2 | 624 | 103 | 64,129 | 160 | 99,840 |

## Profitability analysis in US \$

| Profitability Item | Per Day | Per <br> Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 320 | 8,320 | 99,840 |
| Less: Production \&Operating Costs | 203.5 | 5,292 | 63,505 |
| Profit | 116.5 | 3,028 | 36,335 |

## Government Facilities and Incentives

The government offers $25 \%$ on start-up costs spread equally in the first four years of operations.

## Social Sector



SETTING UP A BAR

## Introduction

This business idea is for selling juice and alcoholic products. A bar is a place where drinks such as beers, soft drinks and some eats are offered for sale and they can be set up in any place especially trading centers which gather many people. Their market structure is wide because it's throughout the year, but its peak is during public holidays and festive seasons hence increasing on their demand.

The business idea is premised on selling of 5 crates of beers, 5 crates of soft drinks, 10 bottles of spirits and 5 boxes of water per day. The revenue potential is estimated at US $\$ 665$ per day translating into US $\$ 207,480$ per year with a net profit margin of $19 \%$ and total investment requirement is US $\$ 7,480$ for the first year of project operation.

## Technology and process Description:

A bar has no complicated technology involved because it involves a working table, refrigerator, waiters and waitresses for serving the customers. Its process description involves purchasing crates of beers, crates of soft drinks and boxes of water in large quantities and selling them to customers in small quantities for immediate consumption.

## Requirements and Equipments:

| Capital Investment Item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Refrigerators | No | 2 | 350 | 700 |
| Gas stove | No | 2 | 200 | 400 |
| Source pans | No | 10 | 15 | 150 |
| Plates | No | 50 | 1 | 50 |
| Working table(Counter) | Unit | 1 | 400 | 400 |
| Chairs | No | 50 | 80 | 4,000 |
| Serving tables | No | 13 | 40 | 520 |
| Glasses | No | 100 | 1.6 | 160 |
| Shelves | Unit | 1 | 400 | 400 |
| Air Conditioners (Fans) | No | 4 | 80 | 320 |
| Music System | Set | 1 | 380 | 380 |
| Total |  |  |  | 7,480 |

## Project Operation and Operating Costs

Production costs assumed are for 312 days per year
Depreciation (fixed asset write off) assumes _4_years life of assets written off at $25 \%$ per year for all assets.
Direct Costs include supplies of products (stock)
A month for sale is assumed to have 26 days.

## Direct Products (Stock) and Costs in US\$

| Cost Item | Units | @ | Qty/ <br> day | cost/ <br> day | cost/ <br> month | cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Beers | Crates | 28 | 5 | 140 | 3,640 | 43,680 |
| Spirits | No | 20 | 10 | 200 | 5,200 | 62,400 |
| Soft drinks | Crates | 7.7 | 5 | 38.5 | 1001 | 12,012 |
| Water | Box | 6 | 5 | 30 | 780 | 9,360 |
| Eats (snacks) |  |  | 100 | 100 | 2,600 | 31,200 |
| Serviettes | Packet | 0.75 | 1 | 0.75 | 19.5 | 234 |
| Silver pack | No | 0.15 | 15 | 2.25 | 58.5 | 702 |
| Sub-total |  |  | 141 | 512 | 13,299 | 159,588 |

## General Costs(Overheads)

| Rent | 160 | 1,920 |
| :--- | :---: | :---: |
| Labour | 200 | 2,400 |
| Utilities(Power \& water) | 100 | 1200 |
| Miscellaneous Costs | 50 | 600 |
| Depreciation (Asset write off) | 193 | 2,316 |
| Sub-total | 703 | 8,436 |
| Total Operating Costs | 14,002 | 168,024 |

Project Product Costs and Price Structure \$

| Item | Qty/day | Qty/yr | @ | Cost/yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Beers | 5 | 1,560 | 19 | 39,000 | 40 | 62,400 |
| Spirits | 10 | 3,120 | 8 | 31,200 | 20 | 62,400 |
| Soda | 5 | 1,560 | 10 | 13,104 | 15 | 23,400 |
| Water | 5 | 1,560 | 4.8 | 9,360 | 8 | 12,480 |
| snacks | 50 | 15,600 | 2 | 35,100 | 3 | 46800 |
| TR per year |  |  |  |  |  | 207,480 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :--- | :--- | :--- |
| Revenue | 665 | 17,290 | 207,480 |
| Less: Production and Operating <br> Costs | 538.5 | 14,002 | 168,024 |
| Profit | 126.5 | 3,288 | 39,456 |

## Market Analysis

The market for this project is throughout the year mainly in busy trading centers, but its peak is during public holidays and festive seasons
Source of Supply of Machinery, Equipment and Stock

## Materials

The supply of Equipments is done locally.

## Government Facilities and Incentives Available

The government has set up institutions and Associations to train people on how to generate profits from their businesses, for example, the Private Sector Foundation of Uganda.

## Social Sector



## VIDEO THEATRE

## Introduction

This business idea is for setting up a video theatre. A video theatre is a place where films and soccer matches are screened and viewers pay a certain fee for the service. Football matches, sports events, music shows and drams can also be shown in video theatre. The project cost is estimated at US\$ 10,846 per year, operational capacity is estimated at100 people per day and revenue is estimated at US\$40,180 per year.

## Production process

The chosen video tape is inserted into a video player which is connected to a television screen for showing films. The video player, decoder and television screen need an electrical supply in order to function.

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Screen | No. | 1 | 800 | 800 |
| Video player | No. | 1 | 80 | 80 |
| Decoder | No. | 1 | 100 | 100 |
| Air conditioners | No. | 4 | 200 | 800 |
| Chairs | No. | 200 | 10 | 2,000 |
| Computer | No. | 1 | 320 | 320 |
| LCD Projector | No. | 1 | 500 | 500 |
| Amplifier | No. | 1 | 500 | 500 |
| Table | No. | 1 | 120 | 120 |
| Total cost of machinery |  |  |  | 5,220 |

## Production and Operating Costs in US\$

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Video CDS | No. | 0.6 | 8 | 4.8 | 124.8 | 1497.6 |
| Subscription for Dstv |  |  | 80 |  | 80 | 876 |
| Sub-total |  |  |  | 4.8 | 204.8 | 2,374 |

## General costs(overheads)

| Utilities(water and power) | 200 | 2,400 |
| :--- | :---: | :---: |
| Labour | 150 | 1,800 |
| Rent | 200 | 2,400 |
| Miscellaneous costs | 75 | 900 |
| Depreciation (Asset write off) Expenses | 81 | 972 |
| Sub -total | 706 | 8,472 |
| Total Operating Costs | 910.8 | 10,846 |

## Project Product Costs and Price in US\$

| Item | Period | Shows <br> per day | Cost <br> Per <br> show | Per <br> show <br> value | TCs | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Movie | Per day | 5 | 4 | 35 | 20 | 175 |
|  | Per year | 936 | 4 |  | 3,744 | 32,760 |
| Soccer | Weekend | 4 | 4 | 35 | 16 | 140 |
|  | Per year | 212 | 4 |  | 848 | 7,420 |
| Total per yr |  |  |  |  |  | 40,180 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 128.8 | 3,348 | 40,180 |
| Less production and operating <br> Costs | 34.8 | 903.8 | 10,846 |
| Profit | 94.0 | 2,445 | 29,334 |

## Market Analysis

The market is readily available throughout the year and there is high demand during soccer seasons and holidays. Market for this business is mainly in urban centres and rural areas. The volume of patrons depends on the quality of service

## Sources of materials:

Raw materials are available in urban centres.

## Government Facilities and Incentives

Government set up a Communication Commission which liberalized communication operations. Uganda is a free and liberalized economy.

## Health Sector



## PORTABLE MEDICAL FIRST AID KITS

## Introduction

This profile looks at establishing a project that will make portable medical first aid kits. A first aid kit is a collection of supplies and equipment for use in giving first aid. First aid kits may be made up of different contents depending on who has assembled the kit and for what purpose. It may also vary by region due to varying advice or legislation between governments or organizations.

## Production capacity

This project will be in position of producing 2,600 medical first aid kits per month totaling to 31,200 per year and this generates $9,360,000$ TRs per year. The total operating costs are US\$7,652,400 for the first year of project operation generating annual revenue of US $\$ 9,360,000$ with a net profit margin of $18 \%$.

## Procedure

First aid kits are made by assembling essential medical tools \& equipment and the necessary medicines \& drugs. Standard kits often come in durable plastic boxes, fabric pouches or in wall mounted cabinets. It is recommended that all kits are assembled in a clean, waterproof container to keep the contents safe and aseptic Kits should also be checked regularly and restocked if any items are damaged or out of date.

## Contents

## - Plastic Tweezers

- Disposable gloves are often found in modern first-aid kits.
- Regular strength pain medication
- Gauze and Low grade disinfectant.
- Adhesive bandages (band-aids, sticking plasters).
- Moleskin-for blister treatment and prevention
- Dressings (sterile, applied directly to wound)
- Saline for cleaning wounds or washing out foreign bodies from eyes
- Soap- used with water to clean superficial wounds once bleeding is stopped
- Antiseptic wipes or sprays for reducing the risk of infection in abrasions or around wounds. Dirty wounds must still be cleaned for antiseptics to be effective.
- Burn dressing, which is usually a sterile pad, soaked in a cooling gel.


## Daily Raw materials for one Kit

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/ <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Direct Costs |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plastic Tweezers | Pairs | 12 | 100 | 1,200 | 31,200 | 374,400 |  |
| Disposable Gloves | Pairs | 4 | 200 | 800 | 20,800 | 249,600 |  |
| Pain Medication | Packs | 10 | 100 | 1,000 | 26,000 | 312,000 |  |
| Surgical Mask | Pairs | 15 | 100 | 1,500 | 39,000 | 468,000 |  |
| Apron | Pairs | 5 | 100 | 500 | 13,000 | 156,000 |  |
| Container | Sets | 25 | 100 | 2,500 | 65,000 | 780,000 |  |
| Saline | Bottles | 10 | 100 | 1,000 | 26,000 | 312,000 |  |
| Soap | Pieces | 5 | 100 | 500 | 13,000 | 156,000 |  |
| Burn Dressings | Packs | 20 | 100 | 2,000 | 52,000 | 624,000 |  |
| Adhesive Tape | Packs | 15 | 100 | 1,500 | 39,000 | 468,000 |  |


| Haemostatic <br> Agents | Bottles | 12 | 100 | 1,200 | 31,200 | 374,400 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Adhesive <br> Bandages | Rolls | 8 | 100 | 800 | 20,800 | 249,600 |
| Anti septic wipes | Bottles | 10 | 100 | 1,000 | 26,000 | 312,000 |
| Goggles | Pairs | 20 | 100 | 2,000 | 52,000 | 624,000 |
| Gauze | Rolls | 20 | 100 | 2,000 | 52,000 | 624,000 |
| Moleskin | Packs | 40 | 100 | 4,000 | 104,000 | 1,248,000 |
| Dressings | Packs | 10 | 100 | 1,000 | 26,000 | 312,000 |
| Sub total |  |  |  | 24,500 | 637,000 | 7,644,000 |

## General Costs (Over heads)

| Rent | 200 | 2,400 |
| :--- | :---: | :---: |
| Labour | 300 | 3,600 |
| Utilities (Power \&Water) | 200 | 2,400 |
| Sub - total | 700 | 8,400 |
| Total Operating Costs | 637,700 | $7,652,400$ |

## Operating Costs in US\$

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Pdn <br> Cost/yr | UPx | $\mathrm{T} / \mathrm{rev}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Medical Kits | 100 | 31,200 | 245 | $7,652,400$ | 300 | $9,360,000$ |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 30,000 | 780,000 | $9,360,000$ |
| Less: Production \& Operating <br> Costs | 24,500 | 637,700 | $7,652,400$ |
| Profit | 5,500 | 142,300 | $1,707,600$ |

## Sources of Supply of Raw materials:

Raw materials are readily available on the Ugandan market.
Government Facilities and Incentives Available:

## Health Sector



## 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 capital investment requirement is US $\$$ 18,600 generating a revenue potential of 343,200 per year. The net profit margin is $42 \%$ with a payback period of 5 months. 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 and this will generate TR of 343,200US\$ per year.

## 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.

## Equipment:

The essential machinery required includes: (i) Disposable syringe moulding machine (ii) Syringe packaging machine and (iii) Fixed data flexographic printer. These equipments can be imported from India.

## 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.

Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Delivery Van | No. | 1 | 8,000 | 8,000 |
| Flexographic Printer | No. | 1 | 2,800 | 2,800 |
| 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 | 40 | 200 |
| Packaging Machine | No. | 1 | 1,500 | 1,500 |
| Total Amount |  |  |  | 18,600 |

Operating Costs in US\$

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ <br> day | Pdn <br> Cost/ <br> month | Pdn <br> Cost/ <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Sterilasable Paper | Metre | 5 | 10 | 50 | 1300 | 15600 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Ethylene Oxide | Litres | 5 | 50 | 250 | 6,500 | 78,000 |


| Compounded <br> Plastics | Kgs | 0.5 | 500 | 250 | 6,500 | 78,000 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sub total |  |  |  | 550 | 14,300 | 171,600 |

## General Costs (Over heads)

| Rent | 400 | 4,800 |
| :--- | :---: | :---: |
| Packaging Material | 100 | 1,200 |
| Labour | 400 | 4,800 |
| Utilities (Power \& Water) | 300 | 3,600 |
| Repair \& Servicing | 200 | 2,400 |
| Fuel | 400 | 4,800 |
| Depreciation(Asset write off) Expenses | 400 | 4,650 |
| Sub - total | 2,200 | 26,250 |
| Total Operating Costs | 16,500 | 197,850 |

## Project Product Costs \& Price Structure $\mathbf{S}$

| Item | Qty/day | Qty/yr | @\$ | Pdn Cost/ <br> yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Syringes | 2000 | 624,000 | 0.32 | 197,850 | 0.55 | 343,200 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,100 | 28,600 | 343,200 |
| Less: Production \& Operating <br> Costs | 634.13462 | 16,488 | 197,850 |
| Profit | 466 | 12,113 | 145,350 |

## Sources of Supply of Raw Materials in US\$

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.

## Government Facilities and Incentives Available:

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.

## Health Sector

## PROJECT PROFILE ON MAKING SANITARY TOWELS

## Introduction

This business idea is for production and marketing of sanitary towels. A sanitary towel is an absorbent item worn by a woman while she is menstruating, recovering from vaginal surgery or any other situation where it is necessary to absorb a flow of blood from a woman's vagina. The towels are made of cotton, which is extensively grown in Uganda. The product is a necessity. The total investment cost is estimated at US $\$ 47,749$ per year, with a production capacity of 200 packets per day and revenue estimated at US $\$ 53,040$ per year.

The project is expected to yield a net profit of $48 \%$ and payback period of 7 months.

## Production process:

Cotton yarn is knitted into loose fabric tube. The loose fabric tube is cut into required pieces of absorbent cotton with the ends of the towels tied by thread. The towels are packed in printed polythene bags.

## Capital Investment Requirements in US \$

| Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Hand driven knitting machine | No. | 1 | 3,462 | 3,462 |
| Yarn twister | No. | 2 | 173 | 346 |
| TC of machinery |  |  |  | 3,808 |

## Production and Operating Costs in US \$

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cotton <br> threads | Cartons | 1.5 | 2 | 3 | 78 | 936 |
| cardboards <br> boxes | No. | 7 | 3 | 21 | 546 | 6,552 |
| Cotton staple <br> yarn | Yard | 4 | 2 | 8 | 208 | 2496 |
| Absorbent <br> cotton | kg | 6.5 | 5 | 32.5 | 845 | 10,140 |
| Sub -total |  |  |  |  | 1677 | 20124 |
| Craft papers | Grams | 14 | 8 | 112 | 2912 | 34944 |

## General costs(overhead)

| Utilities(water and power) | 50 | 600 |
| :--- | :---: | :---: |
| Labour | 83 | 1000 |
| Rent | 125 | 1,500 |
| Production and operating costs | 41.66667 | 500 |
| Distribution costs | 260 | 3,120 |
| Depreciation(Asset write off)Expenses) | 79 | 952 |
| Sub -total | 639 | 7672 |
| Total Operating Costs | 2,316 | 27,796 |

1, Production costs assumed 312 days per year with a daily capacity of 200, packets of sanitary towels
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 Cost and Price

| Item | Qty/ <br> day | Qty/ <br> yr | @ | Pdn <br> cost/ <br> yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Sanitary <br> Towels | 200 | 62,400 | 0.45 | 27,796 | 0.9 | 53040 |

## Profitability Analysis (\$)

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 170 | 4,420 | 53,040 |
| Less production and <br> operating Costs | 89 | 2316 | 27796 |
| Profits | 81 | 2104 | 25244 |

## Market Analysis

Sanitary towels are on high demand in urban areas and are supplied in supermarkets, retail shops, hospitals, dispensaries, educational instructions and clinics. Demand has stretched to rural areas due to raising standards of living.

## Government Facilities and Incentives Available

There are a number of government programs to facilitate industrialists; one such institution is Private Sector Foundation Uganda that has boosted the capacity and development of business plans.

## Sources of raw materials

Raw materials are locally available and equipments can be imported from China and India

## Tourism Sector



## FOREST LODGE

## Introduction

This business idea is for establishing a forest lodge. This business idea aims at accommodating 8 people per day. The revenue potential is estimated at US $\$ 31,171$ per month translating into US $\$ 374,052$ per year. The total investment capital is US\$ 876,730 and a profit of US $\$ 1,049,688$ per year. This idea is also expected to yield a net profit margin of $74 \%$ and to have a payback period of 6 months.

## Project Description

The idea assumes a facility with 20 rooms, accommodating an average of 8 people per night and serving 15 plates of food and 20 drinks per day. Other incomes may be got from entry to the facility just to relax.

## Capital Investment Requirements in US\$

| Item | Qty | Cost | Amount |
| :--- | :---: | :---: | :---: |
| Land Purchase (acres) | 5 | 28000 | 140,000 |
| site preparation | 5 | 2800 | 14,000 |
| Generator | 1 | 3200 | 3,200 |
| Solar Panels | 20 | 15000 | 300,000 |
| Gas (Big cylinder) | 1 | 5000 | 5,000 |
| Cottage Construction | 20 | 12000 | 240,000 |
| Water Pump | 1 | 40000 | 40,000 |
| Telecom equipment | 1 | 2000 | 2,000 |


| Walkways, campsite, | 1 | 3000 | 3000 |
| :--- | :---: | :---: | :---: |
| Tv-15" | 25 | 240 | 6,000 |
| Radio system | 1 | 402 | 402 |
| Beddings and curtains | 1 | 2000 | 2,000 |
| Kitchen Requirements | 1 | 64000 | 64,000 |
| Office Requirements | 1 | 24800 | 24,800 |
| Center/coffee table | 15 | 180 | 2,700 |
| Single bed boxes | 13 | 150 | 1,950 |
| Twin bed boxes | 22 | 200 | 4,400 |
| Easy sofas | 50 | 140 | 7,000 |
| Side stool | 40 | 24 | 960 |
| Mattresses | 50 | 70 | 3,500 |
| Money Safe | 1 | 400 | 400 |
| Vehicles | 2 | 4000 | 8,000 |
| Restaurant equipment | 1 | 2400 | 2,400 |
| Front office designs | 1 | 1000 | 1,000 |
| Key holders | 30 | 0.6 | 18 |
| Total |  |  | 876,730 |

## Production and Operating Costs

## Direct Materials, Supply and Costs in US\$

| Cost Item | Units | Pdn <br> cost/ day | Pdn cost/ <br> month | Pdn cost/ <br> year |
| :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Food stuffs | various | 400 | 12,000 | 144,000 |
| :--- | :---: | :---: | :---: | :---: |
| Sub-total |  |  | 12,000 | 144,00 |

## General Costs(Overheads)

| Utilities(Firewood \& Water) | 4,600 | 55,200 |
| :--- | :---: | :---: |
| Labour | 53,340 | 640,080 |
| Miscelleneous costs | 200 | 2,400 |
| Depreciation(Asset write off)Exp | 3,653 | 43,836 |
| Sub-Total | 61,793 | 741,516 |
| Total Operating Costs | 73,793 | 885,516 |

1. Production costs assumed are for 366 days per year.
2. Depreciation (fixed asset write off) assumes a 1 years' life of assets written off at $4 \%$ per year for all assets.
3. A production month is assumed to have 30 days.

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

| Item | Qty/day | Qty/Vr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: |
| Single room | 3 | 1,098 | 300 | 329400 |
| Double room | 5 | 1,830 | 360 | 658,800 |
| Food stuffs | 15 | 5,490 | 50 | 274,500 |
| Drinks | 20 | 7,320 | 12 | 87,840 |
| Other Incomes | 20 | 7,320 | 10 | 73,200 |
| Total |  |  |  | $1,423,740$ |

Profitability Analysis in US\$

| Profitability Item | Per day | Per Month | Per Yr |
| :--- | :---: | :---: | :---: |
| Revenue | 3,901 | 118,645 | $1,423,740$ |
| Less: Operating Costs | 1,039 | 31,171 | 374,052 |
| Profit | 2,862 | 87,474 | $1,049,688$ |

## Market Analysis

With the growing tourist potential in the country, the market is wide. the projected areas include Mt.Elgon National park, Kibale conservation area, Kidepo valley national park, lake Mburo nationa park among others.

## Sources of supply of raw materials

All the raw materials required in the operation of the lodge are locally available in Uganda. These include food, drink and bed facilities. Food stuffs can be obtained from any local community adjacent to the protected area. Drinks (soft and beers) and bed facilities can be obtained from either nearby trading centers or Kampala city.

## Government facilities \& incentives available

The Government supports the formation of Associations in different sectors. In addition the Uganda Investment Authority is also set up to promote and facilitate the potential investors.

## Tourism Sector



## HOLIDAY HOMES/ TIME SHARE APARTMENTS

## Introduction

This business idea is for constructing holiday homes/time share apartments. A holiday home apartment is a property with a particular form of ownership or use of rights. These kinds of apartments are for middle class families who want to reduce on their costs when they go for vacations.

The apartments are normally paid for weekly or monthly and for that period one owns the apartment for the rest of his/ her life.

The investor will help members of the apartments to form a home owners association which will collect the annual maintenance fees.

The project is expected to be completed in 6 years. Revenue will be obtained starting from the 3rd year and profits will be accrued from the 4th year.
The apartments will be sold to 52 persons per week throughout the years. There will be marketing of the properties via estate agents. The market will be sought on the start of phase 1 such that by the time you finish construction of phase 1 , you would have sold $1 / 2$ of the block. The building project is expected to be completed within 72 months. All members will be advised to book in time such that they don't collide. Members shall pay US $\$ 1000$ as annual
maintenance fee and US\$200to join time share exchange club.
Some materials and equipments can be got in Uganda while others are imported.

## Scale of Investment

Capital cost projections in US Dollars(\$) 000

| ITEM | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 | Year 7 | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Land | 120 |  |  |  |  |  |  |  |
| Landscaping | 8 |  |  |  |  |  |  |  |
| Architect | 100 |  |  |  |  |  |  |  |
| Planning | 8 |  |  |  |  |  |  |  |
| Buildings | 0 | 780 | 780 | 780 | 780 | 0 | 8 |  |
| Wall fence |  | 100 | 250 | 50 |  | 0 | 3,120 |  |
| Pool \& Gym |  |  | 200 | 50 | 100 |  | 400 |  |
| Commission | 0 | 0 | 32 | 62 | 62 | 73 | 21 | 251 |
| Staff | 0 | 25 | 84 | 84 | 84 | 25 | 0 | 302 |
| website |  | 5 | 0 | 0 | 2 | 0 | 0 | 7 |
| Promotion | 0 | 90 | 90 | 90 | 90 | 90 | 30 | 480 |
| Interest | 0 | 0 | 300 | 300 | 300 | 0 | 0 | 900 |
| Total | 236 | 1,000 | 1,736 | 1,416 | 1,418 | 188 | 51 | 6,046 |

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

| Sales | 0 | 0 | 1,560 | 3,120 | 3,120 | 3,640 | 1,040 | 12,480 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 236 | 1,000 | 1,736 | 1,416 | 1,418 | 188 | 51 | 6,046 |
| Profit | -236 | $-1,000$ | -176 | 1,704 | 1,702 | 3,452 | 989 | 6,435 |

## Sales of Apartment

| Year | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Apartments | 0 | 0 | 3 | 6 | 6 | 7 | 2 | 24 |
| Number of weeks |  |  | 52 | 52 | 52 | 52 | 52 | 260 |

## Market analysis and opportunities

The market for holiday homes/ time share apartments is high since this kind of business doesn't exist yet in Uganda. Due to the growth of the tourism sector in Uganda, there is need to exploit such an opportunity. The revenue is determined by the level of tourists and middle class families who need to cut on the costs incurred when living in hotels.

## Risk:

Inability to access foreign buyers for the time share properties which can also be solved through proper marketing.

## Tourism Sector



## FOUR STAR BRANDED TOURIST HOTEL

## Introduction

A franchise shall be brought from one of the world's best hotel for travelers known as Holiday Inn Express Hotel. Due to the growth and development of the tourism sector, there is a need to exploit such an opportunity by establishing such a hotel such that when tourists come to the country, they don't miss what is in their home land. The franchiser will do the marketing of the hotel internationally hence making massive sales/revenue.
However, the franchisee will be expected to pay $10 \%$ of the sales made monthly. The franchise shall be bought with cutesy that whoever will be a customer of holiday inn express, shall also be a customer in the precedent host. The hotel shall be designed to the standards of the franchiser.

Its market is determined by local individuals and the level of tourists who come for the holidays since Uganda is gifted by
nature which attracts a number of foreigners to come and spent their holiday especially during winter and summer seasons. Also government officials, diplomats and foreign investors having meetings, conferences and workshops are part of the market.

The business aims at having 70 rooms, consisting of single deluxe, double deluxe , family suits, 100 seat conference room, health club with sauna and gym, adults and kids swimming pool, 2 hotel shuttles, and parking for $30-40$ vehicles.

The revenue potential is estimated at US $\$ 2,646,000$ with a net profit margin of $32 \%$ and an estimated payback period of 1 year and 1 month. The total capital investment for the project is US $\$$ 3,011,725.

## Hotel capacity

The hotel is a long term investment and for the first two years, it's expected to have $50 \%-70 \%$ occupancy. However, full capacity utilization is at hosting 70 guests per day.

## Capital Investment

| Item | units | qty | @ | amount |
| :--- | :---: | :---: | :---: | :---: |
| land | acres | 2 | 160,000 | 240,000 |
| buildings |  | 1 | $2,000,000$ | $2,000,000$ |
| housekeeping items |  | 70 | 1,000 | 70,000 |
| furniture \&fittings |  | 70 | 8,000 | 560,000 |
| architectural plan |  | 1 | 20,000 | 20,000 |
| Motor vehicles and <br> Equipment |  | 2 | 50,000 | 100,000 |
| generator |  | 1 | 5,000 | 5,000 |
| Computers |  | 5 | 1,000 | 5,000 |
| security items |  | 1 | 10,000 | 10,000 |
| telephone intercom lines |  | 75 | 23 | 1,725 |
| Total |  |  |  | $3,011,725$ |

## Service and Operational costs in US Dollar

| Direct costs | units | @ | qty/ <br> day | service <br> cost/ <br> day | service <br> cost/ <br> month | service <br> cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Fuel | litres | 1.46 | 20 | 29 | 876 | 10,512 |


| stationery |  | 4 | 2 | 8 | 228 | 2,736 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  <br> maintenance | No. | 1 | 1 | 100 | 3,000 | 36,000 |
| housekeeping <br> supplies |  | 100 | 4 | 400 | 12,000 | 144,000 |
| foods and <br> drinks |  <br> crates | 3,000 | 1 | 3,000 | 90,000 | $1,080,000$ |
| advertising <br> costs |  |  |  |  | 5,000 | 60,000 |
| franchise fee |  |  |  |  |  | 5,000 |
| telephone <br> costs |  |  |  |  | 116,104 | $1,659,934$ |
| sub total |  |  |  |  |  |  |

## general costs

| salaries/wages | 40,000 | 480,000 |
| :--- | :---: | :---: |
| utilities(power \& water) | 30,000 | 360,000 |
| Depreciation (Buildings) | 3,333 | 40,000 |
| Depreciation (furniture and fittings) | 4,667 | 56,000 |
| Depreciation Housekeeping items | 1,944 | 23,333 |
| Motor vehicles and Equipment | 2,083 | 25,000 |
| miscellaneous expenses | 2,000 | 24,000 |
| sub total | 84,028 | $1,008,333$ |
| Total operating expenses | 200,132 | $2,668,267$ |

## Probability Analysis

|  | per day | per month | per year |
| :--- | :---: | :---: | :---: |
| Revenue (Rooms) | 7,350 | 220,500 | $2,646,000$ |
| Revenue (other) | 2,450 | 73,500 | 882,000 |
| total operating expenses | 7,412 | 222,356 | $2,668,267$ |
| Profit | 2,388 | 71,644 | 859,733 |

Risk:
Fluctuations in tourist and visitor numbers which can be mitigated through proper marketing


## MULTI-STOREY CAR PARK

## Introduction

The Multi-storey car park is one of the businesses that are still virgin in the country. A building of six levels accommodating approximately 80 spaces each on a site of approximately 0.5 acres located in one of the busy areas of the city centre would give the proposed park a wide catchment area. The park is planned to accommodate 500 vehicles with an occupancy rate of $80 \%$ per day.

In its basic form the proposed car park building should be rectangular, with the footprint fully occupying the available site with two access ramps. The construction works to completion will take up to 12 months at a cost of US $\$ 2,280,000$. On completion of construction the car park is estimated to generate a profit margin of $26 \%$ per annum and a payback period of 3 years 3 month.

## Design considerations

The design shall include both architectural and structural plans. The proposed Car-park architectural design will consider the customer carefully and provide a system that is simple and safe. It must however, be compatible with the locality and follow the guidelines established by the Local Planning Authority in terms of appearance and scale. These principles of use and planning tend to control the size of the car park, circulation facilities, and geometric design requirements. Parking yards, stairs and ramps are the major features in the design and the design must have all stairs rise to the full height of the building, giving access/exit to all levels including the roof. Interior ramps are most commonly used.

Parking structures are subjected to the heavy and shifting loads of moving vehicles, and must bear the associated physical stresses. It is therefore imperative that expansion joints are used between sections not only for thermal expansion but to accommodate the flexing of the structure's sections due to vehicle traffic.

## Construction Process

The site shall be cleared and leveled and left to settle ready for Construction will be started just like any other storey building taking into consideration the pressure it is bound to hold. It is proposed that frameless 'structural' glazing is used to the outer walls of the stair towers allowing daylight to flood in and clear views out. The solid walls and roof elements of the stairs are finished in smooth white render, enhancing the simple, clean lines.

Capital Investments Requirements

| Capital investment <br> item | units | Qty | @ in <br> US \$ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Land (0.5 Acres) | No. | 1 | 600,000 | 600,000 |
| Site Development( <br> Excavation \$ filling) |  | 1 | 400,000 | 400,000 |
| Construction of 6 Storey <br> Parking Block |  | 1 | $1,600,000$ | $1,600,000$ |
| Site Management |  | 1 | 40,000 | 40,000 |
| Office Equipment | No | 1 | 25,000 | 25,000 |
| Computer Equipment |  | 1 | 10,000 | 10,000 |
| Motor Vehicle | No | 1 | 20,000 | 20,000 |
| Breakdown Towing and <br> Emergency Repairs |  | 2 | 60,000 | 120,000 |
| Preliminary Expenses | No | 1 | 50,000 | 50,000 |
| Total |  |  | $2,805,000$ | $2,865,000$ |

## Infrastructure Sector

## Production and Operating Costs

Operational costs Per Year

|  | Per/month | Per Year |
| :--- | :---: | :---: |
| Staff Salaries | 3,200 | 38,400 |
| Other Staff Costs | 4,690 | 56,280 |
| Motor vehicle operations and maintenance | 300 | 3,600 |
| Office Supplies | 500 | 6,000 |
| Utilities (Water, Electricity \& Telephones) | 300 | 3,600 |
| Public Relations | 60 | 3,600 |
| Building Insurance | 833 | 10,000 |
| Depreciation Expenses | - | - |
| Total Operating Costs | 9,883 | 121,480 |

1. The service is assumed to be provided for 312 days per year.
2. Depreciation assumes Buildings at $2 \%$, MV at $20 \%$, computers $10 \%$ and Equipments at $12.5 \%$
3. A production Month is assumed to have 26 work days.

## Service Costs and Price Structure in US\$

| Item | \% of <br> Occupancy | Lots | Lots available <br> Per Day | Lots available <br> Per Yr | UPx | Rve/ <br> Mth | Rve /Yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Parking Fee Revenue

| 2 Hourly Parking Lots | $20 \%$ | 4 | 4 | 384.0 | 1 | 384 | 119,808 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 Hourly Parking Lots | $30 \%$ | 2 | 2 | 288.0 | 2 | 432 | 134,784 |
| Day Long Parking Lots | $50 \%$ | 1 | 1 | 240.0 | 3 | 600 | 187,200 |
| Overnight Parking Lot | $20 \%$ | 1 | 1 | 96.0 | 4 | 384 | 119,808 |
| Sub-Total |  |  |  |  |  | 1,800 | 561,600 |

## Revenue from Advertising

|  | No. of <br> Levels | No. Per <br> Level | Total Bill <br> Boards | UPx | Revenue/ <br> Month | Revenue <br> $/ \mathrm{Yr}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Advertising space | 6 | 60.0 | 360.0 | 900 | 27,000 | 324,000 |

## Revenue from Breakdown Towing \& Emergency Repairs

|  | Annual <br> Traffic <br> Handled | \% Requiring <br> Emergency | annual No <br> requiring <br> Service | UPx | Revenue/ <br> Month | Revenue <br> $/ \mathrm{Yr}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  <br> Emergency Repair Services | 314,496 | 2.5 | 7,862 | 10 | 6,552 | 78,624 |
| Grand Total |  |  |  |  | 35,352 | 964,224 |

Profitability Analysis

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :---: | :---: | :---: |
| Revenue: |  |  |  |
| Parking Fee | 69 | 1,800 | 561,600 |
| Advertising Space Fee | 1,038 | 27,000 | 324,000 |
| Towing \& Emergency Repairs Fee | 252 | 6,552 | 78,624 |
| Sub-Total | 1,360 | 35,352 | 964,224 |
| Less: Operating Costs | 729 | 18,960 | 230,405 |
| Profit | 630 | 16,392 | 733,819 |

## Market Viability:

The market demand for parking yard is increasing every year due to the increased number of people purchasing vehicles as it has become a necessity rather than a luxury good.

## Risks

The business risk associated with this idea is the thief of Vehicles if the security is not well monitored.

## Infrastructure Sector



## 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 $\$ 21,864$ collecting revenue of US\$49,920 annually form 312 compounds done per year. The project is estimated to yield a net profit margin of $56 \%$ and the payback period of 1 year 9 month.

## 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.

Capital Investment Requirement in US $\mathbf{\$}$

| Item | Units | Qty | Cost | Total |
| :--- | :---: | :---: | :---: | :---: |
| Cutters/ mowers | No | 5 | 1,200 | 6,000 |
| slashers | No | 5 | 5 | 25 |
| Hoes ,level, dustbin, rake Spade | No | 1 | 130 | 130 |
| Motor bikes | No | 2 | 1,100 | 2,200 |
| scissor | No | 5 | 15 | 75 |
| Horse pipes | No | 5 | 40 | 200 |
| carrier basin | No | 5 | 2 | 10 |
| tape measures | No | 5 | 10 | 50 |
| watering cans | No | 5 | 20 | 100 |
| wheelbarrow | No | 5 | 100 | 500 |
| TC of Machinery \& Tools |  |  |  | 9,290 |

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 | @ | Qty/ <br> day | Pdn <br> cost/day | Pdn <br> cost/ <br> mth | Pdn <br> cost/yr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| String (blade) | Meter | 1.5 | 3 | 4.5 | 117 | 1404 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Fuel | Litres | 1.8 | 20 | 36 | 936 | 11232 |
| Sub-total |  |  |  | 41 | 1053 | 12636 |

## General Costs (Overheads)

| Labour | 350 | 4200 |
| :--- | :---: | :---: |
| Selling \& distribution | 150 | 1800 |
| Utilities (Water, power) | 20 | 240 |


| Rent | 40 | 480 |
| :--- | :---: | :---: |
| Miscellaneous expenses | 30 | 360 |
| Depreciation | 194 | 2323 |
| Sub-total | 769 | 9403 |
| Total Operating Costs | 1,822 | 22039 |

## Project service costs and Price structure in

| Service | Comps <br> Design <br> /day | Design <br> comp/ <br> yr | Comp <br> design <br> cost | Comp <br> design <br> cost/yr | Comp <br> design <br> Price | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| designing | 2 | 624 | 57 | 17,815 | 80 | 49,920 |

## Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 160 | 4,160 | 49,920 |
| Less: Production and <br> operating costs | 70 | 1,822 | 21,864 |
| Profit | 90 | 2,338 | 28,056 |

## Marketing

Compound designing is a new development that has come up with modernization that is sweeping society. It eventually includes the maintenance and the demand is immense. The market potential includes: the affluent, Institutions and recreation centers among others. This is a lucrative business venture.

## Source of Equipment and Materials

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

## Ndeeba

Masaka Rd, email lugendojohn07@yahoo.com can fabricate machines.

## Government Incentives

Deductible annual allowances on all locomotives, equipment and machinery

## Infrastructure Sector



## 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:

- Mortar Mixer \& Moulds
- Spades \& Wheel barrows
- Water tanks
- Cutters
- Finishers

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

## Scale of Investment, Capital Investment Requirements

 and EquipmentThe scale of Investment is estimated at US\$ 4,458.

## 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, and Telecommunication, Tunnels, Residential and Commercial buildings.

## Project Costs

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

## Fixed Capital Requirements in US\$

| Capital Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Truck | No | 1 | 3,000 | 3,000 |
| Mortar Mixer | No | 1 | 910 | 910 |
| Moulds | No | 4 | 60 | 240 |
| Spades | No | 2 | 3.2 | 12.8 |
| Wheel barrows | No | 2 | 34.6 | 69.2 |
| Water tank | No | 1 | 183 | 183 |
| Cutters | No | 2 | 15 | 30 |
| Finishers | No | 2 | 3.2 | 6.4 |
| Sieve tray | No | 1 | 7 | 7 |
| Total |  |  |  | 4458.4 |

## Production \& Operating Costs in US\$

| Item | Units | @ | Qty/ <br> day | Prod. <br> Cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/ <br> Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## Direct Costs

| Lake Sand | Trps | 122 | 0.2 | 24.4 | 634.4 | 7,613 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Swampy Sand | Trps | 102 | 0.08 | 8.16 | 212.16 | 2,546 |
| Sand Stones | Trps | 122 | 0.04 | 4.88 | 126.88 | 1,523 |
| Wire Mesh | Roll | 12 | 0.04 | 0.48 | 12.48 | 150 |


| B. Wire | Roll | 32 | 0.04 | 1.28 | 33.28 | 399 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cement | Kgs | 0.24 | 865 | 208 | 5,400 | 64,801 |
| Sub total |  |  |  |  | 6,419 | 77,032 |

## General Costs (Over heads)

| 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 |
| Sub - total | 3,156 | 37,869 |
| Total Operating Costs | 9,575 | 114,901 |

Project Product Costs and Price Structure:

| Item | Qty/ <br> day | Qty/yr | @ $\$$ | Pdn <br> Cost/yr\$ | UPx | T/rev |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Manhole covers | 100 | 31,200 | 4.52 | 141,334 | 6 | 187,200 |

Profitability Analysis

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

## Sources of Supply of Raw materials

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

## Government Facilities and Incentives Available

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

## Infrastructure Sector



## MAKING CEMENT BASED PRODUCTS

## Introduction

The business idea is for the production of and marketing of cement based products. Cement Products are more on the move nowadays with the increase in housing activity. These may include but are not limited to: Cement Blocks, pavers, Bricks, Slabs, Culverts, Manhole covers, Sculptures or Statues to mention but a few. To have such an Investment one needs to have at least a small piece of land of about $1 / 2$ Acre that can be either rented or owned. The idea is premised on production of 26,000 blocks per month and 312,000 per year. The revenue potential is estimated US 218,400\$per year with total investment of US $\$ 13215.5$.

## Process Description and Production Capacity

Cement, sand, stone chips, stone dust and rods are mixed in suitable proportions along with water. This concrete mix is placed on metal or wooden moulds. For reinforcement, wire mesh or rods are placed between successive layers of Concrete mix and compacted by vibration. The cast items are kept for a day to set. They are then cured in water tank for 15 days for complete setting.
Capital Investment Requirements

| Capital investment item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Cement Block making Machine | No. | 1 | 6,400 | 6400 |
| Cement mixing machine | No. | 1 | 5700 | 5700 |
| Coffee tray | No. | 1 | 6.7 | 6.7 |
| Vibrator | No. | 1 | 800 | 800 |
| Moulds | No. | 50 | 2 | 100 |
| Wheel barrows | No. | 6 | 34.8 | 208.8 |
| Total cost on machinery |  |  |  | 13215.5 |

## Production and Operating Costs in US\$

This business idea is premised on production of 1,000 blocks. A producer needs 500 kg of cement, $1,500 \mathrm{~kg}$ of stone dust and $4,000 \mathrm{~kg}$ of sand that totals to $6,000 \mathrm{~kg}$ per day.

| Cost <br> Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ day | Pdn cost// <br> month | Pdn cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cement | kg | 0.04 | 500 | 20 | 520 | 6,240 |
| Stone dust | Tones | 75 | 1.5 | 112.5 | 2925 | 35,100 |
| Sand | Tones | 50 | 4 | 200 | 5200 | 62,400 |
| Sub-total |  |  |  | 332.5 | 8,645 | 103,740 |

## General costs(overheads)

| Utilities(water and power) | 275 | 3,300 |
| :--- | :---: | :---: |
| Labour | 1,300 | 15,600 |
| Rent | 200 | 2,400 |
| Miscellaneous costs | 50 | 600 |
| Administration expenses | 275 | 3,300 |
| Repairs and maintenance | 100 | 1,200 |
| Depreciation (Asset write off)Expenses | 3304 | 39,647 |
| Sub -total | 5,504 | 66,047 |
| Total Operating Costs | 14,149 | 169,787 |

Ratio=1:3:8, that is cement, stone dust and sand respectively ( kg ) and each dried block weighs 6 kg

Project Product Costs and Price in US\$

| Item | Qty/day | Qty/yr | @ | Pdn cost/yr | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Cement <br> blocks | 1,000 | 312,000 | 0.5 | 169,787 | 0.7 | 218,400 |
| Total |  | 312,000 |  |  |  | 218,400 |

Profitability Analysis in US\$

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 700 | 18,200 | 218,400 |
| Less production and operating Costs | 544 | 14,149 | 169,787 |
| Profit | 156 | 4,051 | 48,614 |

## Market Analysis

Cement based products are used in construction of houses, schools and other public buildings and compounds.

## Sources of Raw Materials and Equipments

Raw materials can be locally supplied and equipments can be
fabricated locally by John Lugando \&Co.ltd and Kisenyi- Kampala.

## Government facilities and incentives available

In a bid to boost the construction sector, the government of Uganda has reduced taxes on all Construction materials.

## Infrastructure Sector



## ESTABLISHING A METAL WORKSHOP

## Introduction

This is a business idea premised on setting up a metal workshop to fabricate different items for stocking for any buyer to pick at will and also to fabricate on order. The establishment of a modern workshop would require an estimated fixed capital of US $\$ 3,016$ and operating costs of US\$ 119,612 generating revenue of US\$ 164,786 in the first year of operation. The workshop would be able to fabricate a variety of items as demand dictates and among others doors, windows, beds, chairs, and gates would be produced and stocked.

## Production Capacity, Technology and Process

The process involves the cutting of the plates, tube pipes, angle lines, hollow sections and bars for a particular item, assemble them into an article, weld and grind them. Then, filler paste is applied where necessary and thereafter the article is sprayed.

## Capital Investment Requirements in US\$

| Capital Investment Item | Units | Qty | $@$ | Total |
| :--- | :--- | :--- | :--- | :--- |
| Welding Machine | No | 1 | 500 | 500 |
| Vice | No | 2 | 130 | 260 |
| Welding Machine | No | 1 | 240 | 240 |
| Grinding Machine | No | 2 | 100 | 200 |
| Hack Saw blade | No | 2 | 10 | 20 |
| Drilling Machine | No | 2 | 100 | 200 |


| Compressor/Spraying | No | 1 | 500 | 500 |
| :--- | :--- | :--- | :--- | :--- |
| Welding Torch | No | 2 | 25 | 50 |
| Welding Guards | No | 2 | 8 | 16 |
| Cutters | No | 2 | 300 | 600 |
| Bending Kit | No | 1 | 300 | 300 |
| Rivet Gun | No | 1 | 30 | 30 |
| Tool Kit | No | 1 | 100 | 100 |
| Total |  |  |  | 3,016 |

Production and Operating Costs in US\$

## (a)Direct Materials, Supplies and Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn Cost/ <br> day | Pdn Cost/ <br> mth | Pdn <br> Cost/yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs |  |  |  |  |  |  |
| Angle Lines | Pcs | 23 | 0.3 | 6.75 | 175.5 | 2,106 |
| Hollow <br> Sections | Pcs | 20 | 7 | 140 | 3640 | 43,680 |
| Tube Pipes | Pcs | 7 | 3.6 | 25.2 | 655.2 | 7,862 |
| Mild Steel <br> Plates | Pcs | 53 | 0.2 | 10.5 | 273 | 3,276 |
| Welding Rods | Pkts | 2.5 | 2.8 | 7 | 182 | 2,184 |
| Grilling <br> Discs | Pcs | 3 | 5.6 | 16.8 | 436.8 | 5,242 |
| Locks | Pcs | 40 | 0.4 | 16 | 416 | 4,992 |
| Filler Paste | Pkts | 5 | 0.4 | 2 | 52 | 624 |
| Hinges | Pairs | 1 | 16.3 | 16.3 | 423.8 | 5,086 |
| U-Channel | Pcs | 43 | 0.1 | 4.25 | 110.5 | 1,326 |
| Other <br> materials |  | - | - | 104 | 2704 | 32,448 |
| Sub-total |  |  | 36.7 | 348.8 | 9,069 | 108,826 |

## General Costs (Overheads)

| Rent | 250 | 3,000 |
| :--- | :---: | :---: |
| Labour | 300 | 3,600 |
| Protective ware | 73 | 876 |
| Power | 150 | 1,800 |


| Miscellaneous | 63 | 756 |
| :--- | :---: | :---: |
| Depreciation | 63 | 754 |
| Sub-total | 899 | 10,786 |
| Total Operating Costs | 9,968 | 119,612 |

1) Production costs assumed 312 days per year with daily capacity of producing 5 pieces of metal products.
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) Total monthly days assumed are 26 -days.
5) The valuation currency used is United States Dollars.

Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> Cost/yr | UPx | Total <br> Rve |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Gates | 0.19 | 59.28 | 600 | 35,568 | 750 | 44,460 |
| Front doors | 0.38 | 118.56 | 205.00 | 24,305 | 300 | 35,568 |
| Rear Doors | 0.38 | 118.56 | 51.33 | 6,086 | 70 | 8,299 |
| Windows | 1.92 | 599.04 | 74.00 | 44,329 | 82 | 49,121 |
| Chairs | 1.92 | 599.04 | 21.00 | 12,580 | 30 | 17,971 |
| Beds | 0.19 | 59.28 | 127.01 | 7,529 | 158 | 9,366 |
| Total |  | 1,554 |  | 130,396 |  | 164,786 |

Profitability Analysis Table

| Profitability Item |  |  | Per day |
| :--- | :---: | :---: | :---: | Per Mnth Per year | Revenue | 528.16 | 13,732 | 164,786 |
| :--- | :---: | :---: | :---: |
| Less: Production and Operating Costs | 383 | 9,968 | 119,612 |
| Profit | 144.78949 | 3,765 | 45,174 |

## Marketing

The market potential is great because the construction industry is among the fastest growing sectors of our economy. There is a lot of demand for doors, gates, windows and burglar proofing etc.

## Government Facilities and Incentives

There is a lot of encouragement by the government to whoever is setting up any production unit more so if it is to create some form o employment. The Trade and Commerce policies are all attuned to support any form of investment

## Infrastructure Sector



## MAKING MOSAIC TERRAZO TILES

## Introduction

This business idea is for making mosaic terrazzo tiles. Mosaic floor tiles, are made of cement, sand and coloured stone chips. They are sold in attractive colours with a shining smooth surface. They are used extensively in making floors of residential as well as commercial blocks. Mosaic tiles are load bearing, termite proof, impermeable and easy to clean. The business idea aims at production of 62,400 square metres of tiles each year. The revenue potential is estimated at $\$ 343,200$ per year with a sales margin of $10 \%$. The total capital investment for the project is $\$ 3,630$.

## Plant Capacity

The plant would have a minimum capacity of 3,000 square metres of tiles each month. This is on the basis of 300 working days per year and 8-hour single daily work shifts but output can be increased as bigger portions of the market are captured.

## Technology and Production Process

The machinery used to produce mosaic terrazzo tiles includes: a Hydraulic pump, a Hydraulic accumulator, a grinding machine, a colour mixing machine, a Semi-polishing machine and tile moulds. The raw materials include: Portland cement, White cement, Marble powder and chips, Black and other colours and Sand and stone chips.

Ratios of cement, coloured stone chips, sand and grey cement are well mixed. The mixture is then pressed and tiles are removed.
They are then stacked in wooden racks for a day. The tiles are then soaked in water for 24 hours and cured for two weeks. Finally, the tiles are semi-polished and stacked for sale.

## Scale of Investment

The project can be operated with a fixed capital requirement of 3,300 dollars.

## Capital Investments Requirements

| Capital Investment item | Units | Qty | $@$ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Hydraulic Pump | Number | 1 | 440 | 440 |
| Grinding Machine | Number | 1 | 880 | 880 |
| Colour Mixing Machine | Number | 1 | 550 | 550 |
| Semi Polishing Machine | Number | 1 | 550 | 550 |
| Tile Moulding machine | Number | 2 | 220 | 440 |
| Hydraulic Accumulator | Number | 1 | 770 | 770 |
| Total |  |  |  | 3,630 |

## Production and operating costs in US \$

## Direct Materials, Supplies and Costs

| Cost item | Units | @/ <br> day | Qty/ <br> day | Cost/ <br> day | Cost/ <br> mth | Cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct Costs <br> Portland Cement | Bags | 12.5 | 20 | 250 | 6,500 | 78,000 |
| White Cement | Bags | 10 | 19 | 190 | 4,940 | 59,280 |
| Marble Powder | Bags | 10 | 15 | 150 | 3,900 | 46,800 |
| Sand and Stone <br> Chips | Tonnes | 10 | 15 | 150 | 3,900 | 46,800 |
| Colours | Bags | 12 | 10 | 120 | 3,120 | 37,440 |
| Subtotal |  | 33 | 54 | 860 | 22,360 | 268,320 |

## General Costs(Overheads)

General Costs(Overheads)

| Administration expenses | 500 | 6,000 |
| :--- | :---: | :---: |
| Labour | 1,500 | 18,000 |
| Utilities | 300 | 3,600 |
| Rent | 1,125 | 13,500 |
| Selling \& Distribution | 542 | 6,504 |
| Depreciation | 69 | 828 |
| Miscellaneous | 375 | 4,500 |
| Subtotals | 4,410 | 52,932 |
| Total operating Costs | 26,770 | 321,252 |

Land and shelter can be rented at 13,500 dollars annually.
Project Costs and Price Monthly Revenue

| Item | Qty/day | Qty/yr | @ | Prod. Cost/ <br> yr | UPx | Revenue |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Tiles | 200 | 62,400 | 5.2 | 321,245 | 5.5 | 343,200 |

Profitability Analysis table

| Profitability item | Per day | Per month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 1,100 | 28,600 | 343,200 |
| Less: Production operating costs | 1,030 | 26,771 | 321,252 |
| Profit | 70 | 1,829 | 21,948 |

Sources of Supply of Equipments and Raw Materials Raw materials and equipments can be imported from China.

## Market Analysis

The demand for mosaic terrazzo tiles is high mostly in urban centres especially construction companies. Hardware shops also form a big component of the market for these tiles.

## Infrastructure Sector



## BUSINESS IDEA FOR ESTABLISHING A CAMPSITE

## Introduction

This business idea is for establishment of a Camp Site. This is setting up a site with facilities where Travelers and, or Tourists can camp and stay overnight or for some days. This involves acquiring land of more than an acre and secures it. Avail facilities like lavatories or washrooms, tents, laundry faculties, kitchen, a canteen or bar. There could be some dormitory facilities with some bedding provided. There must be mattresses and blankets for use when you hire the tents. A business center could be established or at least an Internet connection with a computer and possibly photo copying and Fax facilities. There could be some reliable transport that could be hired if need arise. The travelers or tourists come and stay and use the facilities while enroute to their next destination. All facilities are paid for at modest fees and thus the guest chooses what to use depending on his financial ability.

## Requirements

The Campsite is registered as the law prescribes and the facilities put in place. These include:

## Capital Investment Requirements

| Capital Investment Requirements |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Capital Investment Item | Units | Qty | @ | Total |
| Land | Acre | 1 | 25000 | 25,000 |
| Premises | No |  |  | 60,000 |
| Kitchen Facility | No |  |  | 1,500 |
| Tents | No | 50 | 150 | 7,500 |
| Beddings | No |  | 1500 | 1,500 |
| Dinning Equipments | No |  |  | 500 |
| Furniture | No |  |  | 1,000 |
| Games Equipment | No |  |  | 500 |
| TV and Music Systems |  |  | 1000 | 1,000 |
| Business Center <br> Establishment | No |  |  | 3,000 |
| Total |  |  |  | 101,500 |

## Production and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> Cost/ <br> day | Pdn <br> Cost/ <br> mth | Pdn <br> Cost/yr |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |


| Direct Costs |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Restaurant <br> materials <br> Costs | - | - | - | 100 | 2,600 | 31,200 |  |
| Bar <br> materials <br> Costs | - | - | - | 81 | 2,106 | 25,272 |  |
| Sub-total |  |  |  |  | 4,706 | 56,472 |  |


| Advertising | 200 | 2,400 |
| :--- | :---: | :---: |
| Labour | 500 | 6,000 |
| Utilities | 150 | 1,800 |
| Internet\&DSTV Subscription | 140 | 1,680 |
| Cleaning and Toiletries | 200 | 2,400 |
| Miscellaneous | 100 | 1,200 |
| Depreciation | 1593.75 | 19,125 |
| Sub-total | 2883.75 | 34,605 |
| Total Operating Costs | 7,590 | 91,077 |

1. Production costs assumed 365 days per year with daily capacity of serving 20 guests.
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. Total monthly days assumed are 30 -days.
5. The valuation currency used is United States Dollars.

## Market Analysis:

Tourism is one of the fast growing sectors of the economy and the number of foreign guests is increasing steadily. There is demand for Camping facilities in different parts of the country. Places like Lake Mburo Sanctuary Reserve, Budadiri, Murchison Falls National Park, Queen Elizabeth National Park, and Kidepo National park are potential areas where this proposal can profitably start. Some of the existing facilities are very inadequate. A very aggressive marketing is required especially in the Tourist sector to cause awareness of the presence of these types of facilities at modest Prices.

Project Product Costs and Price Structure

| Service | gst/ <br> day | Gsts/ <br> yr | Serv- <br> cost | Rng <br> costs/yr | Charge/ <br> gst | Total <br> Rve |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hospitality | 20 | 6,240 | 14.60 | 91,077 | 35 | 218,400 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Mnth | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 700 | 18,200 | 218,400 |
| Less: Production and Operating <br> Costs | 292 | 7,590 | 91,077 |
| Profit | 408 | 10,610 | 127,323 |

## Government Incentives:

The government trough Uganda Tourist Board, took the initiative to advertise Uganda on the International scene which has partly boosted the said growth in the sector. Furthermore there are some facilitations accruing to the developers in Tourism sector, like access to tax free importation of some of the items to facilitate the services. There is campaign to develop and boost domestic tourism.

## Infrastructure Sector



## PROJECT PROFILE FOR A TENT HOUSE

## Introduction

This business idea is a service provider activity. It entails the hiring out of tents, utensils, plastic chairs and tables, tarpaulins mobile toilets stage mounting equipment etc. These items are stocked and hired to people organizing various functions such as weddings, birthday parties and public ceremonies. This is a business that is easy to run.

The project requires estimated fixed capital of US\$ 191,210 and operating costs of US $\$ 62,843$ generating revenue of US $\$ 113,620$ , with a net profit margin of $40 \%$ and a payback period of 1 year 7 months.

## Process and Capacity

The items are hired out and arrangements are such that they are delivered and tents are fixed for the functions and are picked after the functions. For success of this business cleanliness and time consciousness are taken very seriously. High ethical standards must be maintained to build a strong clientele and confidence.

Capital Investment Requirements in USS

| Capital Investment Item | Units | Qty | @ | total |
| :--- | :---: | :---: | :---: | :---: |
| Tents(50-seater) | No | 20 | 1,100 | 22,000 |
| Tents(100-Seater) | No | 20 | 1,640 | 32,800 |
| Tents(150-Seater) | No | 15 | 2,180 | 32,700 |
| Tents(200-Seater) | No | 10 | 3,080 | 30,800 |
| Utensils | No | - | - | 1,450 |
| Plastic Chairs | No | 1,000 | 44 | 44,000 |
| Plastic Tables | No | 20 | 48 | 960 |
| Service Vehicle | No | 2 | - | 26,000 |
| Office Furniture | No | - | - | 500 |
| Total |  |  |  | 191,210 |

## Production and Operating Costs

(a)Direct Materials, Supplies and Costs

| Operating Costs |  | Per yr |
| :--- | :---: | :---: |
| Rent | 150 | 1,800 |
| Labour | 800 | 9,600 |
| Selling and Distribution | 600 | 7,200 |
| Cleaning and Toiletries | 100 | 1,200 |
| Utilities | 40 | 480 |
| Miscellaneous | 42 | 504 |
| Depreciation | 3,984 | 47,803 |
| Total Operating Costs | 5,237 | 68,587 |

1. Production costs assumed 365 days per year with daily capacity of hiring out 4 -times.
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. Total monthly days assumed are 26-days
5. The valuation currency used is United States Dollars.

## Market Analysis

There is a lot of potential in this area as many functions are organized almost daily ranging from wedding ceremonies to funeral vigils, get-together to graduation parties etc. Once the service is impressive the business potential is unlimited. People always expect to receive the best.

Project Product Costs and Price Structure

| Service | Fcns/ <br> wk | Fcns/ <br> yr | Fcn hng <br> cost | Optg <br> cost/yr | Hiring- <br> Chge | Total <br> Rve |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Tent Hiring |  |  |  |  |  |  |
| Tents <br> 50-Seater) | 7 | 364 | 42 | 15,169 | 50 | 18,200 |
| Tents <br> (100-Seater) | 6 | 312 | 35 | 10,920 | 60 | 18,720 |
| Tents <br> (150-Seater) | 5 | 260 | 35 | 9,100 | 75 | 19,500 |
| Tents <br> (200-Seater) | 4 | 208 | 35 | 7,280 | 100 | 20,800 |
| Chairs | 7 | 364 | 35 | 12,740 | 100 | 36,400 |
| Total | 1,508 |  | 55,209 |  | 113,620 |  |
|  |  |  |  |  |  |  |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per year |
| :--- | :---: | :---: | :---: |
| Revenue | 364 | 9,468 | 113,620 |
| Less: Production and <br> Operating Costs | 220 | 5,716 | 68,587 |
| Profit | 144 | 3,753 | 45,034 |

## Government Incentive

The government maintains a liberalized trade and commerce policy which reduces encumbrances to the trading community. It encourages any entrepreneur who creates some form of employment.


## Education Sector

## School Payroll Expenses

|  | Projected No. Of Staff |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | A/YR 2 | A/YR 3 | A/YR 4 | A/YR 5 | Rate@ Month Per Person. <br> (US\$) |
| Head Master | 1 | 1 | 1 | 1 | 1,200 |
| Deputy Head Teachers |  |  | 2 | 2 | 800 |
| Director of Studies | 1 | 1 | 1 | 1 | 700 |
| Matron/Patron | 2 | 2 | 2 | 2 | 500 |
| Subject Heads |  | 10 | 10 | 10 | 600 |
| School Teachers | 10 | 5 | 15 | 15 | 500 |
| Bursar | 1 | 1 | 1 | 1 | 800 |
| Accounts Assistants |  | 2 | 4 | 4 | 400 |
| Pool Intern Teachers |  | 5 | 10 | 10 | 200 |
| Non-teaching | 5 | 5 | 10 | 10 | 250 |
| Others | 5 | 5 | 10 | 10 | 150 |
| Total | 25 | 37 | 66 | 66 |  |

School Fees Revenue (US\$'000's)

|  | No. Of <br> Students | Fees Rate/ <br> term | Term I | Term II | Term III | Total <br> Fees | Total Fees <br> $90 \%$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academic year 2 |  |  |  |  |  |  |  |
| School Fees - Day | 100 | 0.4 | 40.0 | 40.0 | 40.0 | 120.0 |  |
| School Fees - Boarding | 240 | 0.9 | 216.0 | 216.0 | 216.0 | 648.0 |  |
| Sub-total | 340 |  | 256.0 | 256.0 | 256.0 | 768.0 | 691.2 |


| Academic year 3 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| School Fees - Day | 150 | 0.5 | 75.0 | 75.0 | 75.0 | 225.0 |  |
| School Fees - Boarding | 600 | 1.0 | 600.0 | 600.0 | 600.0 | 1,800.0 |  |
| Sub-total | 750 |  | 675.0 | 675.0 | 675.0 | 2,025.0 | 1,822.5 |
| Academic year 4 |  |  |  |  |  |  |  |
| School Fees - Day | 150 | 0.5 | 75.0 | 75.0 | 75.0 | 225.0 |  |
| School Fees - Boarding | 1,000 | 1.0 | 1,000.0 | 1,000.0 | 1,000.0 | 3,000.0 |  |
| Sub-total | 1,150 |  | 1,075.0 | 1,075.0 | 1,075.0 | 3,225.0 | 2,902.5 |
| Academic year 5 |  |  |  |  |  |  |  |
| School Fees - Day | 150 | 0.5 | 75.0 | 75.0 | 75.0 | 225.0 |  |
| School Fees - Boarding | 1,000 | 1.0 | 1,000.0 | 1,000.0 | 1,000.0 | 3,000.0 |  |
| Sub-total | 1,150 |  | 1,075.0 | 1,075.0 | 1,075.0 | 3,225.0 | 2,902.5 |
| TR Projection |  |  | 3,081.0 | 3,081.0 | 3,081.0 | 9,243.0 |  |

## Market Analysis

This school will cater for a niche market of pupils from middle class families. This market segment has got the ability to pay for quality education at a premium. The middle class is a growing class of Uganda's economy.

There is ready market throughout the country as more and more children go to school. The UPE programme has boosted the numbers.

The quality of the school also determines the number of students in a school in terms of qualified staff, good examination results, infrastructures like good buildings, dormitories, nice looking compound among others.

## Source of Supply of Machinery, Equipments and Raw Materials

The supply of raw materials, Machinery and Equipments is procured locally although it could also be imported from countries like Japan, South Africa and Chain.

## Government Facilities and Incentives Available

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

## Risk Certainty

This business idea is associated with some manageable risks like outbreak of fire. This can be caused poor electric connections. However, this can be addressed by insuring the school and putting in place preventive measures like fire extinguishers, among others.

## Works \& Transport Sector



## SERVICING MOTOR VECHICLES

## Introduction

Motor vehicle service is a series of maintenance procedures carried out at a set time interval or after the vehicle has travelled a certain milage. The service capacity is 8 cars per day; total capital investment is estimated at US $\$ 4,760$ per year and estimated revenue is US $\$ 102,960$ per year.

## Servicing Process

Clean-out is accomplished by applying suction near the top of the oil layer in the first compartment until it is completely removed, then proceeding directly to the sludge layer and removing the same. The intermediate water layer is left to act as a seal. The other chamber(s) should also be checked to ensure no significant quantity of oil or sludge is present.

## Capital Investment Requirements

| Capital investment <br> item | Units | Qty | @ \$ | Amount <br> $\$$ |
| :--- | :---: | :---: | :---: | :---: |
| Compressor | No. | 1 | 1,250 | 1,250 |
| Service tunnel | No. | 1 | 2,000 | 2,000 |
| Cc pump | No. | 1 | 150 | 150 |
| Tool box | No. | 1 | 1,250 | 1,250 |
| Grease pump | No. | 1 | 100 | 100 |
| Spray gun | No. | 1 | 10 | 10 |
| TC on equipment |  |  |  | 4,760 |

## Servicing and Operating Costs

| Cost Item | Units | @ | Qty/ <br> day | Pdn <br> cost/ <br> day | Pdn <br> cost/ <br> month | Pdn <br> cost/ <br> year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Oil | Ltrs | 3 | 8 | 24 | 624 | 7,488 |
| Brake fluid | Ltrs | 8 | 2 | 17 | 450 | 5,400 |
| Oil Filter | Pieces | 4 | 2 | 9 | 225 | 2,700 |
| Coolant | Itrs | 8 | 2 | 12 | 300 | 3,600 |
| Fuel Filter | Pieces | 1 | 20 | 20 | 520 | 6,240 |
| Battery water | Ltrs | 5 | 2 | 8 | 200 | 2,400 |
| Sub-total |  |  | 36 | 89 | 2,319 | 27,828 |

## General costs(overheads)

| Utilities (water and power) | 400 | 4,800 |
| :--- | :---: | :---: |
| Labour | 900 | 10,800 |
| Rent | 350 | 4,200 |
| Administrative cost | 300 | 3,600 |
| Miscellaneous costs | 200 | 2,400 |
| Depreciation (Asset write off) Expenses) | 99 | 1,190 |
| Sub -total | 2,249 | 26,990 |
| Total Operating Costs | 4,568 | 54,818 |

1. Serving costs assumed 312 days per year with a daily capacity of 8 cars
2. Depreciation (fixed assets write off) assumes 4 years life of assets written off at $25 \%$ per year for all assets

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

| Item | Qty/day | Qty/yr | @ | Pdn cost <br> $/ y r$ | UPx | TR |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Big cars | 2 | 624 | 44 | 27,409 | 75 | 46,800 |
| small cars | 6 | 1,872 | 15 | 27,409 | 30 | 56,160 |
|  |  | 2,496 |  |  |  | 102,960 |

## Profitability Analysis

| Profitability Item | Per day | Per month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 330 | 8,580 | 102,960 |
| Less production and operating <br> Costs | 176 | 4,568 | 54,818 |
| Profit | 154 | 4,012 | 48,142 |

## Market Analysis

Serving a vehicle is mandatory to all owners of cars. The market is in both urban and rural areas since motor vehicles work in both areas. The quality of service would influence the market.

## Sources of Raw Materials

Consumables can be found in motor vehicle spare parts shops.

## Government facilities and incentives

The government has favorable tax policy incentives. There is assistance through organization like Private Sector Foundation Uganda where small scale firms and medium sector enjoy partial financing on development initiatives.

## Oil \& Gas Sector



## PETROLEUM JELLY

## Introduction

Cosmetic products are widely used by many people in the country. Cosmetic products can attract a great customer base if they are of high quality. An estimated fixed cost of US $\$ 16,790$ when injected into the project can yield estimated revenue of US $\$ 281,190$ in the first year of operation. The payback period is approximately 6 months. Due to the increasing demand for the product in both rural and urban areas, there is market viability for the product The idea envisages production of 60,000 units annually.

## Production Process

The technology and process is simple. The process involves mixing crude petroleum jelly with lubrication oils using a mixer. The mixture is passed into a boiler and heated until it melts. While being stirred by a mixer, perfumed ingredients are added and stirred together with the boiling jelly. The thoroughly mixed liquid jelly is then passed to a chilling container to cool at a temperature of about $400^{\circ} \mathrm{C}$ and then packed in the respective packing containers.

## Capital Investment Requirements

| Capital Investment Item | Units | Qty | @ | Amount |
| :--- | :---: | :---: | :---: | :---: |
| Mixer | No | 2 | 660 | 1,320 |
| Boiler | No | 1 | 1,870 | 1,870 |
| Cooler | No | 2 | 385 | 770 |
| Gas cooker | No | 1 | 825 | 825 |
| Mixing container | No | 2 | 330 | 660 |
| Transfer funnels | No | 3 | 41.8 | 125.4 |
| Furniture and fixture | No | 1 | 2,200 | 2,200 |
| Delivery van | No | 1 | 7,700 | 7,700 |
| Other tools | No | 1 | 1,320 | 1,320 |
| Total |  |  |  | $16,790.4$ |

## Production and Operation costs

| Cost Item | Units | @/ <br> day | Qty/ <br> day | Pdn Cost/ <br> day | Pdn <br> Cost// <br> month | Pdn <br> Cost/ <br> Year1 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Direct costs3:      <br> Crude <br> Petroleum Jelly Kgs 0.75 129 97 2,517 <br> Oils Litres 3 7 22,200  <br> Scented <br> ingredients Kgs 7.5 1 10 250 <br> Wax Kgs 2 2 4 100 <br> Packaging <br> materials Pieces 0.04 721 29 1,200 <br> Sub-total     4,200 |  |  |  |  |  |  |

## General costs (Overheads)

| Labour | 700 | 8400 |
| :--- | :---: | :---: |
| Other materials | 1000 | 12000 |
| Utilities | 1500 | 18000 |
| Administrative expenses | 1500 | 18000 |
| Selling and Distribution | 3250 | 39000 |
| Fuel | 3000 | 36000 |


| Miscellaneous expenses | 700 | 8400 |
| :--- | :---: | :---: |
| Depreciation (Asset write off) Expenses | 2544 | 30528 |
| Sub-total | 14194 | 170328 |
| Total Operating Costs | 18,394 | 219,652 |

1. Production is assumed for 312 days per year.
2. Depreciation assumes 4 year life of assets written off at $25 \%$ per year for all assets.
3. A production Month is assumed to have 26 days.

## Project Product costs and Price Structure

| Item | Qty / <br> day | Qty/ yr | @ | Pdn/yr | UPx | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| revenue |  |  |  |  |  |  |
| Petroleum jelly | 721 | 224,952 | 1 | 220,728 | 1.25 | 281,190 |
| Total |  |  |  | 220,728 |  | 281,190 |

## Profitability Analysis Table

| Profitability Item | Per day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 901 | 23,433 | 281,190 |
| Less: Production and <br> Operating Costs | 704 | 18,304 | 219,652 |
| Profit | 197 | 5,039 | 61,538 |

## Market analysis

The market for cosmetics widely exists both in urban and rural areas. Producing different brands may increase the sales revenue though there is stiff competition from other service providers such as: Movit products Ltd, Samona products Itd, Mwana mugimu, Sleeping baby and other imported cosmetics.

## Sources of supply of raw materials and equipments

 All raw materials and equipments are imported
## Oil \& Gas Sector



## CATERING IN THE OIL AND GAS SECTOR

## Introduction

The Oil and gas sector is a new and growing sector In Uganda with a high demand for quality catering services. Caterers supply food to oil workers located on oil fields which tend to be isolated away from normal towns. It will require mobility and portable services. Establishing a modern Catering service can prove to be a profitable business. The establishment of this project requires a total fixed cost of US $\$ 25,000$ with a working capital of about US $\$ 40,000-$ sufficient for two months operating costs. Generating revenue of 563,160 in the first year of operation. The project has a payback period of 1 year and 3 months with a $36 \%$ profit margin.

## Production Capacity, Technology \& Process

The production process involves preparation of both Local and international Foods such as sandwich, Beef burgers, Fried chicken, chips, spaghetti, Pizza, Matooke, Rice, Yams, Cassava, Boiled Irish Potatoes, Posho with all Stews and Snacks such as Chips, Chicken, Fish among others and Beverages. The production will serve 400 clients daily for breakfast, Lunch and supper.

Investment Scale, Capital Requirements \& Equipment A typical oil well team will consist of anywhere up to 200-400 people. This plan is based on serving two sites with a total of 400 people to feed. Capital requirements are estimated at US $\$ 25,000$

## Capital Investment Requirements in US\$

| Capital investment item | Units | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Blenders | No | 6 | 50 | 300 |
| Fridges | No | 3 | 400 | 1200 |
| Cutlery | Sets | 60 | 20 | 1200 |
| Furniture | No | - | 1000 | 1,000 |
| Cooking Equipments | No | - | 3000 | 3000 |
| Music System, TV \& Computer | No | 3 | 400 | 1,200 |
| Food warmers, | No | 6 | 110 | 660 |
| mixers \&flasks |  | 10 | 30 | 300 |
| Delivery Van | No | 1 | 7,000 | 7000 |
| Bouquet set | Sets | 5 | 350 | 1750 |
| Gas and water tanks | No | 2 | 2000 | 2000 |
| Decoration materials, empty crates | No | - | 550 | 550 |
| Standby generator | No | 1 | 800 | 800 |
| Plates and other kitchen equip |  | - | 4000 | 4,000 |
| Total |  |  |  | 24,960 |

## Production and Operating Costs

| Cost Item | Units | Unit | Qty/ | Pdn <br> cost// <br> day | Pdn <br> cost// <br> Mnth | Pdn <br> cost/ <br> Yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Food Items | Bchs | - | - | 300 | 7,800 | 93,600 |
| Sauce Items | Kgs | - | - | 140 | 3,640 | 43,680 |
| Beverages (water,soder <br> etc) | Cts | - | - | 200 | 5,200 | 62,400 |
| Spices, Cooking oil, <br> Sugar etc (seasonings) | Kgs | - | - | 30 | 780 | 9,360 |
| Other materials |  |  | - | 20 | 520 | 6,240 |
| Sub-total |  |  | - | 690 | 17,940 | 215,280 |

## General Costs (Overheads)

| Labour | 500 | 6,000 |
| :--- | :---: | :---: |
| Utilities | 400 | 4,800 |
| Gas \& Charcoal | 300 | 3,600 |
| Uniforms | 40 | 480 |


| Cleaning \& Toiletries | 200 | 2,400 |
| :--- | :---: | :---: |
| Miscellaneous expenses | 100 | 1,200 |
| Depreciation | 520 | 6,240 |
| Sub-total | 2,060 | 24,720 |
| Total Operating Costs | 20,000 | 240,000 |

1. Production costs assumed 312 days per year with daily capacity of selling 130plates of food, 150 bottles of beverages $\& 80$ cups of tea.
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. Total monthly days assumed are 26 -days

## All costing is in US Dollars

## Project Product Costs and Price Structure

| Item | Qty/ <br> day | Qty/yr | @ | Pdn <br> cost/ <br> yr | UPx | T/rev |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Foods | 400 | 124,800 | 1.03 | 128880 | 3.5 | 436,800 |
| Beverages | 330 | 102,960 | 0.44 | 45680 | 0.5 | 51,480 |
| Tea | 300 | 93,600 | 0.46 | 42608 | 0.8 | 74,880 |
| Total | 1030 |  |  | 98,676 |  | 563,160 |

## Profitability Analysis Table

| Profitability Item | Per Day | Per Month | Per Year |
| :--- | :---: | :---: | :---: |
| Revenue | 1805 | 46,930 | 563,160 |
| Less: Pdn \& Operating Costs | 769 | 20,000 | 240,000 |
| Profit | 1036 | 26,930 | 323,160 |

## Market Analysis

The market readily exists as the Oil sector has taken an expanding trend in Uganda with outside catering services being the most suitable arrangement for the supply of food to the workers, the business is a viable venture.

## Government facilities and incentives

The government actively encourages Ugandans to participate in the oil sector by providing support services such as catering.

## Forestry Sector



## SEASONING OF WOOD

## Introduction

This business idea is premised on production of 59,800 seasoned wood/timber per month which translates into 717,600 products per year. The revenue potential is estimated at US $\$ 70761$ per month which translates into US $\$ 849,132$ per year. The project cost is US $\$ 50600$.

## Production Process

The two methods of seasoning timber are; air seasoning and kiln seasoning. But one can use the following steps; Chop the wood/ pole to the desired measurements, Stack the wood so it isn't sitting directly on the ground or right up against a wall, Allow space between your stack and a wall to allow air to move, Ensure that the top of the wood is covered to allow rain to run off without soaking the wood, but the ends of the stack are uncovered to allow air to circulate and moisture to escape.

## Tools and Equipment in US\$

| Item | Unit | Qty | @ | Total |
| :--- | :---: | :---: | :---: | :---: |
| Vertical Boiler | No. | 1 | 3,850 | 3,850 |
| Conveyer Belts | No. | 1 | 1,100 | 1,100 |
| Lift loaders | No. | 1 | 9,350 | 9,350 |
| Electric oven with <br> thermostatic buzzer | No. | 1 | 2,200 | 2,200 |
| Hand tools | No. | 1 | 1,100 | 1,100 |
| Trucks | No. | 2 | 16,500 | 33,000 |
| TC of Machinery |  |  |  | 50,600 |

## Production and Operating Costs in US\$

## Direct Materials, Supplies and Costs

| Cost Item | Units | $@ /$ <br> day | Qty/ <br> day | Prod. <br> cost/ <br> day | Prod. <br> Cost/ <br> month | Prod. <br> Cost/ <br> yr |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Electric Poles | No. | 50,000 | 100 | 500 | 13,000 | 156,000 |
| Fencing poles | No. | 0.8 | 2,200 | 0.0004 | 0.009 | 0.108 |
| Chemicals | Ltrs | 0.5 | 20 | 0.025 | 1 | 12 |
| Sub-total |  |  |  |  | 13,001 | 156,012 |

## General costs (Overheads)

| Utilities (power) | 100 | 1,200 |
| :--- | :---: | :---: |
| (Utilities (water) | 15 | 180 |
| Salaries | 300 | 3,600 |
| Rent | 300 | 3,600 |
| Depreciation (Assets write off) Expenses | 1054 | 12,648 |
| Sub-total | 1,769 | 21,228 |
| Total Operating costs | 14,770 | 177,240 |

Project Product Costs and Price Structure In US\$

| Item | Qty/ <br> day | Qty/yr | @ | Prod./ <br> $\mathrm{yr}(\$)$ | UPx | TR (\$) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Electric poles | 100 | 31,200 | 0.3 | 7,800 | 75 | 585,000 |
| Fencing poles | 2,200 | 686,400 | 0.3 | 176,088 | 1.5 | 264,132 |
| TR |  |  |  | 183,888 |  | 849,132 |

## Profitability Analysis In US\$

| Profitability item | per day | per month | per year |
| :--- | :---: | :---: | :---: |
| Revenue | 2721.6 | 70761 | 849,132 |
| Electric poles | 1,875 | 48,750 | 585,000 |
| Fencing poles | 847 | 22,011 | 264,132 |
| Less Prod \& Operating <br> Costs | 568 | 14,770 | 177,240 |
| Profit | 2,153 | 55,991 | 671,892 |

## Market

The seasoned wood is used by various government departments including: Defence, Electricity and Railways as well as private individuals for making furniture, sleepers, interior furnishings, doors and window frames etc. Therefore, the market can be exploited.

## Sources of Raw Materials and Equipment

Raw materials like timber and other wood can be obtained from the local market. Some of the above tools and equipments can be fabricated locally.

## Government Incentives

Government through National Forestry Authority has embarked on conservation of forests and planting of various species of trees.

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[^0]:    1. Production costs assumed are for312 days per year with daily capacity of 961
