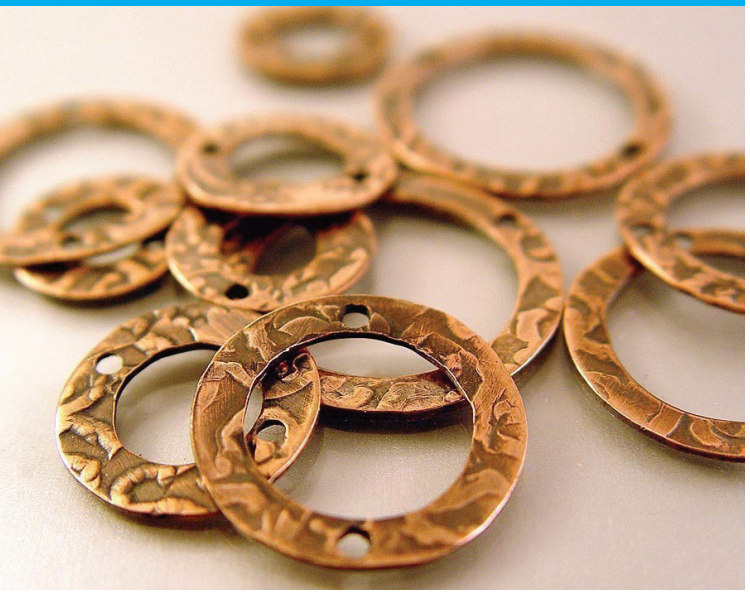
Trade Sector
(Light Manufacturing)



JEWELLERY MAKING

Introduction

This is about making jewelerry such as rings, brooches, chains, and bracelets by cutting, shaping and polishing the material for producing fashion jewels. Jewelry is used by women mostly though of late men have started using it. This business idea aims at production of 200 pieces of jewelry per day thus 62,400 pieces annually. The revenue potential is estimated at US $ 62,400 annually and the total investment is estimated at US $ 1,580 in the first year of Project operation. The net profit margin is estimated at 39%.

Production Process

It involves collecting, designing and decorating beads, horns, metals, stones, shells and joining them with threads and strings.

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 Item	Units	Unit cost	Qty/day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ 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 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 / day	Qty/yr	Unit Cost	Pdn/yr	Unit 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
(Light Manufacturing)

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 cost
Direct Costs				
Used shock absorbers	Pcs	0.25	12.82	83.3
lubricating oil and fluids	ltrs	6	0.32	50
Rubber bushes/seals	pkts	13	0.06	22
Packaging material	ltrs	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
(Light Manufacturing)

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, knives)	N0	400	150	60,000
Washbasins	No	4	2	6
TC on equipment				64,946

Production and Operating Costs in US $

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ 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 / day	Qty/yr	@	Pdn cost /yr	UPx	TR
Plate of food with chicken	30	9,360	1.5	14,040	2.5	23,400
Plate of food with 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 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
(Light Manufacturing)

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 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 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.

Production and Operating Costs

(a)Direct Materials, Supplies and Costs $

Cost Item	Units	Unit	Qty/	Pdn cost/	Pdn cost/	Pdn 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, 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
(Light Manufacturing)

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, 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 cost	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ yr
Direct Costs						
Food stuffs (rice, posho, potatoes, cassava and bananas).	Kgms	2	30	60	1,560	18,720
Cooking oil	ltres	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

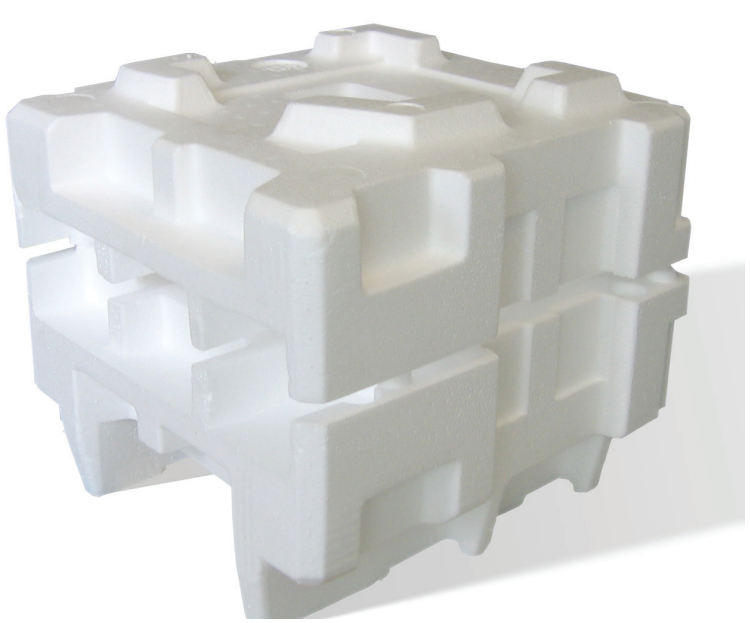
Project product costs and Price structure

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
(Light Manufacturing)



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/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Direct Cost						
Low Density 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) assumes4 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 cost/Yr	UPx	T/rev
Expanded Pet 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
(Light Manufacturing)

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 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/ day	Pdn Cost/ day	Pdn Cost/ Mth	Pdn cost/ yr
Direct Costs						
Mild Steel Plates (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 Cost	Pdn 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
(Light Manufacturing)

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

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ 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/ day	Qty/Yr	Unit cost	Pdn/Yr	Unit Price	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
(Light Manufacturing)

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$ 283,920, 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/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ 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)

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

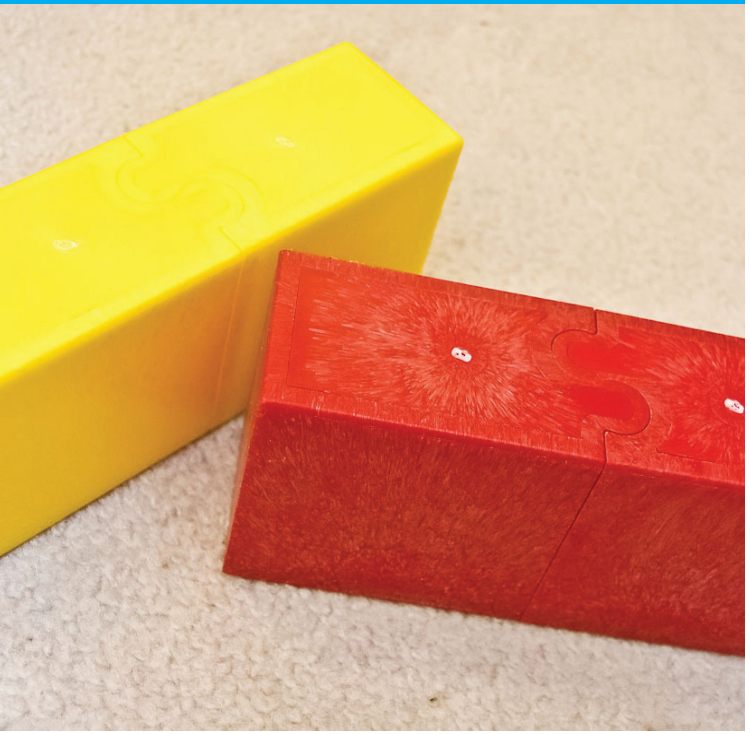
Item	Qty/ day	Qty/yr	@	Pdn cost/ yr	UPx	T/rev
Modern Fishing Hooks	260	81,120	1.5	123,094	3.5	283,920

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
(Light Manufacturing)



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	@/ day	Qty/ day	Prod. cost/ day	Prod. Cost/ month	Prod. Cost/ 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/ day	Qty/yr	@	Prod. Cost / year	UPx	TR
Plastic bricks	500	156,000	0.5	12,743	1	156,000

Profitability Analysis in US $

Profitability item	per day	per 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
(Light Manufacturing)

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/ day	Qty/ yr	@	Prod. Cost / year	UPx	TR
Sweaters (small size)	36	11,232	3.70	41,558	6.0	67,392
Sweaters (big 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 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
(Light Manufacturing)

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 15ft *20ft, and a store of about 15ft* 10ft 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	Units	@	Qty/ day	Pdn Cost/ day	Pdn Cost/ mth	Pdn Cost/ yr
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 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.

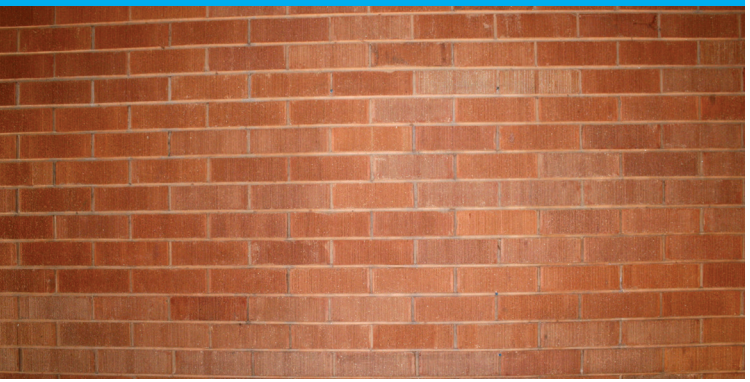
Project product costs and Price Structure

Item	Qty/ day	Qty/yr	@	Pdn Cost/yr	UPx	Total 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 Costs	1576	40,980	491,765
Profit	664	17,260	207,115

Trade Sector
(Light Manufacturing)



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 4056000half 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/ day	Pdn cost/ day	Pdn cost/ yr	Pdn cost/ 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
(Light Manufacturing)

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	@/ day	Qty/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ yr
Cotton knitted 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	2,250	58,500	702,000
Less production and 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

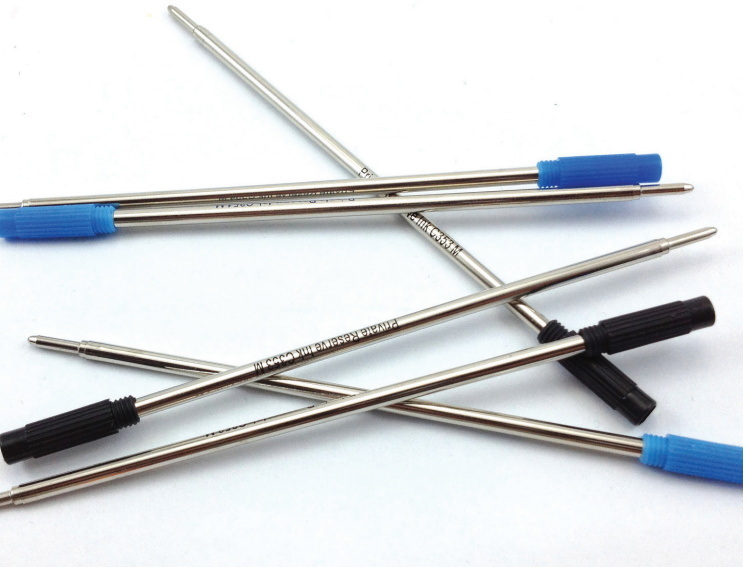
Source of raw materials and equipment

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
(Light Manufacturing)



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/ day	Pdn Cost/day	Pdn Cost/ month	Pdn Cost/ Year
Direct costs3:						
HDPE granules	Kgs	0.5	10	5	130	1,560
Tips	No	0.005	550	2.75	71.5	858
Packing 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

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 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
(Light Manufacturing)

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/ day	Pdn Cost/ day	Pdn Cost/ mth	Pdn 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 3,500-150mgs 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/ day	Qty/yr	@	Pdn Cost/yr	UPx	Total Rve
Mosquito 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
(Light Manufacturing)

MAKING HERBAL BATH SOAP

Introduction
This profile envisages the setting up of a plant for the production of Herbal bath soap with a capacity of 200kg per day. The herbal bath soap is a kind of soap that contains natural ingredients like the essential oils from aloe vera, patchouli, citronella, rose and sampaguita.

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

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/ day	Prod. Cost/ day	Prod. Cost/ month	Prod. Cost/ 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
(Light Manufacturing)

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 7200-7600C. 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 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 Cost	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ yr
Direct Costs						
Aluminium metal	kgs	0.13	32	4	108	1,300
Mineral spirit	ltrs	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

1. Production costs assumed are for312 days per year with daily capacity of 961 kgs
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and other costs directly incurred to produce the product.
4. Currency used is US Dollars.

Project product cost and Price Structure in $

Item	Qty/ day	Qtyyr	Unit cost	Pdn cost/yr	Upx	Total rev
Aluminum 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 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
(Light Manufacturing)

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 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 US$

Item	Units	@	Qty/ day	Prod. Cost/ day	Prod. Cost/ month	Prod. 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/ day	Qty/yr	@$	Pdn 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
(Light Manufacturing)

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	@/ day	Qty/ day	Pdn cost/ day	Pdn cost / month	Pdn cost/ year
Acyclic plastic 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/ day	Qty/ yr	@	Pdn 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 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
(Light Manufacturing)

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 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/ day	Pdn Cost/ day	Pdn Cost/ month	Pdn Cost/ year
Direct Costs						
Galvanized 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/ yr	UPx	Total 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 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
(Light Manufacturing)

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 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/ day	Pdn cost/day	Pdn cost/ mth	Pdn cost/ yr
Printing Chemicals	Liter	2.5	5	12.5	325	3,900
Nylon bolting 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/ day	Qty/ Yr	@	Pdn cost/Yr	UPx	T/rev
Screen Printing 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
(Light Manufacturing)

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	-	-	2500
Total				14,950

Production and Operating Costs in US$

(a)Direct materials, Supplies and Costs

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn 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 pigments	Kgs	4	4	16	416	4,992
Water	Ltrs	0.25	16	4	104	1,248
Packaging materials	Pcs	0.12	190	22.8	592.8	7,114
Other 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 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
(Light Manufacturing)

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/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Direct Costs						
Animal Horns	No	0.5	50	25	650	7,800
Colour/Dye	kg	1.5	5	7.5	195	2,340
Packing 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/ day	Qty/ Yr	@	Pdn cost/Yr	UPx	T/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
(Light Manufacturing)

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 Cost/ day	Qty/ day	Prod. cost/ day	Prod. Cost/ month	Prod. Cost/ 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/ day	Qty /yr	@	Prod. 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 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
(Light Manufacturing)

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/ day	Pdn cost/ day	Pdn cost/ mth	Pdn Cost/ 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 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
(Light Manufacturing)

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 °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 $

ITEM	Units	Qty	Price	Total
Reaction vessel with mixer & 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.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

Production and Operation costs in US$

(a) Direct Materials, Supplies and costs.

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/yr
Direct Costs						
Carnauba wax	Kgs	2.5	9.62	24.05	625.3	7,504
Synthetic 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 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 / day	Qty / yr	@	Pdn cost/ 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
(Light Manufacturing)

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/ day	Pdn Cost/ day	Pdn Cost/ mth	Pdn 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 Materials	Kgms	-	-	-	0	0
Packaging 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/ Day	Qty/Yr	@	Pdn cost/yr	Unit Price	Total 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
(Light Manufacturing)

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$528,321per 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 machine	No	1	4,052	4,052
Pre-heating Oven	No	1	58	58
Automatic Toothbrush making 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/ day	cost/ day	cost/ month	cost/ year
Direct Costs						
Cellulose acetate moulding powder	Kg	1	500	500	13,000	156,000
Nylon Bristle	Kg	0.75	200	150	3,900	46,800
Dyes in different 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/ day	Qty/Yr	@	Pdn 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

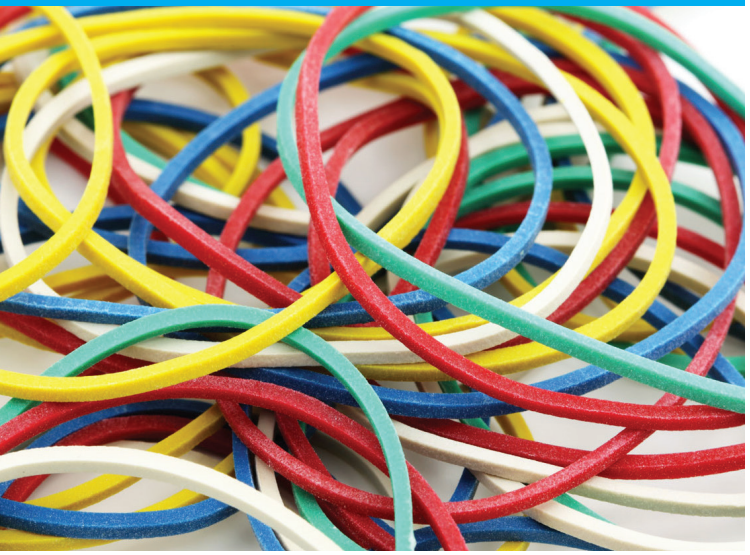
Market Analysis

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
(Light Manufacturing)



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	@/ day	Qty/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ 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 $

Item	Qty/ day	Qty/ yr	@	Pdn cost /yr	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
(Light Manufacturing)

BUSINESS IDEA FOR DISTILATION OF WATER

Introduction

This business idea is for production of Distilled water to ensure its purity. The business idea is premised on the production of 200 liters per day which translates into 44,400 liters per year. The revenue potential is estimated at US$ 81,120 per year. The total Investment can cost about US $ 27,200.

Production process

Tap water is collected and heated in a glass flask to the boiling point and thus vaporizes (becomes steam), While other substances remain in solid state, in boiler (glass flask). Steam is then directed into cooler (condenser tube) containing cold water, where it cools down and returns to liquid water, purified of additional substances found in it before distillation

Equipments and tools required in us$

Item	Unit	Qty	@	Total
Water distiller	No.	1	10,000	10,000
Delivery van	No.	1	6,000	6,000
TC of Machinery				16,000

Raw materials

Water

Project capacity

The project has a capacity of 100-240 gallons per day (24hrs)

Production and operating cost in us$

Direct Materials, Supplies and Costs

Cost Item	Units	@/ day	Qty/ day	Prod. Cost / day	Prod. Cost/ month	Prod. Cost/ year
Water	Ltrs	0.001	1	0.001	0.026	0.312
Sub-total					0.026	0.312

General costs (Overheads)

Utilities (power)	50	600
Salaries	300	3600
Rent	150	1800
Fuel	100	1200
Depreciation (Assets write off) Expenses	333	4,000
Sub-total	933.33	11,200
Total Operating costs	933	11,200

The plant is profiled to take a period of 4 years in production
Depreciation rate is 25% per year
Production assumed to take 8 hour per day

Product cost and Price structure in us$

Item	Qty/ day	Qty / yr	@	Prod./ yr	UPx	TR ($)
Distilled water	1,000	312,000	0.04	11,200	0.26	81,120

Profitability analysis in us $

Profitability item	per day	per month	per year
Revenue			
Distilled water	200	5,200	81,120
Less Prod & Operating Costs	36	933	11,200
Profit	164	4,267	69,920

Demand

There is high demand for distilled water as it is purified for human consumption, the distilled water can be supplied to supermarkets, retailers, wholesalers, hospitals and individual organizations.

Equipment suppliers

Small Equipments and machinery can be obtained from the local market.

Government incentive

Government is encouraging small scale businesses and income generating activities to curb poverty.

Trade Sector
(Light Manufacturing)

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/ day	cost/ day	cost/ month	cost/ year
Direct Costs						
Polypropylene 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/ day	Qty/yr	@	Pdn cost/ yr	UPx	T/rev
Plastic Containers	358	111,696	1.4	158,693	1.6	178,714

Profitability Analysis in US$

Profitability Item	Per day	Per 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
(Light Manufacturing)

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

1 1/2 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	@/ day	Qty/ day	rod. cost / day	Prod. Cost/ month	Prod. Cost/ 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 essential oil	Ltrs	0.2	5	1	26	312
rosemary essential oil	Ltrs	0.2	5	1	26	312
lavender essential 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/ day	Qty /yr	@	Prod. Cost / 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
(Light Manufacturing)

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 Item	Units	@/ day	Qty/ day	Prod. cost/ day	Prod. Cost/ month	Prod. Cost/ 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 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/ day	Qty /yr	@	Prod. 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
(Light Manufacturing)

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 450ml caustic potash and 55% or 550ml of water.

1. Weigh the 450ml caustic potash accurately and dissolve this in 550ml 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 560ml 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 180Â°F. Switch off the stove to maintain the 180Â°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 432ml 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 2-5ml 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	@/ day	Qty/ day	Cost/ day	Cost/mth	Cost/Yr
Direct Costs				US$	US$	US$
Coconut oil waste oils	Ltrs	12	19	228	5,928	71,136
Caustic Potash	Ltrs	10	19	190	4,940	59,280
Other 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

Project product cost and Price structure in US $

Item	Qty/ day	Qty/ yr	@	Prodn/ 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
(Light Manufacturing)

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 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	@/ day	Qty/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Para 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/ day	Qty/ yr	@	Pdn cost /yr	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 Costs	365.14423	9,494	113,925
Profit	154.85577	4,026	48,315

Trade Sector
(Light Manufacturing)

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
(Light Manufacturing)

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/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ yr
Direct Costs						
Rubber	Kgs/ pkts	0.1	9.62	0.962	25.012	300.14
other chemicals	ltrs	75	0.32	24	624	7,488
Packaging materials -paper boxes	Kgs/ pkts	0.1	3.21	0.321	8.346	100.15
Lubricant	kgs/ ltres	12.5	0.3	4	104	1,248
Polyethene bags	Kgs/ 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/ day	Qty/yr	@	Pdn cost/ 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 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 Rd-Kisenyi 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
(Light Manufacturing)

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/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/yr
iron and wooden sheets	ltrs/ kgs	1	0.16	0.16	4.16	49.92
Synthetic adhesive	ltrs	0.1	0.1	0.1	2.6	31.2
plaster of Paris	roll	0.04	0.96	0.038	0.9984	12
cushion sheet & whitening powder	ltrs/ 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/ day	Qty/ yr	Unit Cost	Pdn 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 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
(Light Manufacturing)

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/ day	Prod Cost/ day	Prod. Cost/ month	Prod. Cost/ Year
Direct Costs						
Manioc Powder	Kgs	0.5	250	125	3250	39000
Vinegar	Litres	2.5	100	250	6500	78000
Water	Litres	0.05	200	10	260	3120
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/ 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
(Light Manufacturing)

MAKING PENCILS

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

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

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

Process & Technology
Modern pencils are made industrially by mixing finely ground graphite and clay powders, adding water, forming long spaghetti-like strings, and firing them in a kiln. The resulting strings are dipped in oil or molten wax, which seeps into the tiny holes of the material, resulting in smoother writing.

A juniper or incense-cedar plank with several long parallel grooves is cut to fashion a "slat," and the graphite/clay strings are inserted into the grooves. Another grooved plank is glued on top, and the whole assembly is then cut into individual pencils, which are then varnished or painted. Afterwards people can then add personal things like pencil grips and eraser toppers & Labels.

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

Scale of Investment & Capital Investment Requirements
The 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 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/ day	PdnCost/ day	Pdn cost/ mth	Prod. Cost/ 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/ day	Qty/yr	@	Pdn 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 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
(Light Manufacturing)

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/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ yr
Direct Costs						
Paraffin,	ltrs	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 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 cost	Pdn 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 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, educational 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
(Light Manufacturing)

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 50,000kgs per year with estimated revenue of US$ 250,068 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 160.3Ltrs.
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 days
5. Currency used is US Dollars.

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.

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/yr
Direct Costs						
High boiling tar acid	ltrs/ kgs	23	25.64	589.72	15332.72	183,993
Cresol, creosote	ltrs	7.2	3.21	23.112	600.912	7,211
Casein & Borax	ltrs	8	1.6	12.8	332.8	3,994
Sodium benzene	ltrs	13.2	1.6	21.12	549	6,589
W.W. Rosin	ltrs	7.9	0.15	2	31	370
Castor oil & soya bean oil	ltrs/ kgs	10.2	0.25	2.55	66.3	796
Caustic soda	ltrs	12.5	0.32	4	104	1,248
Packing material	kgs/ 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

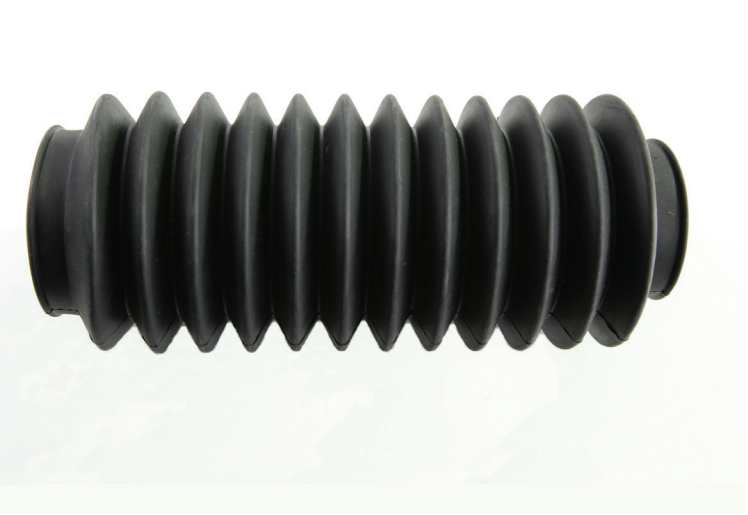
Project product costs and Price structure in $

Item	Qty/day	Qty/yr	Unit cost	Pdn cost/yr	UPx	TR
Disinfectant Fluids	160.3	50,014	4.7	233,627	5	250,068

Profitability Analysis in US

	Per day	Per 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
(Light Manufacturing)



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 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 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	@/ day	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn Cost/ 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) 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 / day	Qty/yr	Unit Cost	Pdn/yr (US$)	Unit Price	T/ rev(US$)
Zinc sulphate	50	15,600	3	45,158	5	78,000

Profitability Analysis Table

Profitability Item	Per day	Per Month	Per Year
Revenue	250	6,500	78,000
Less: Production and Operating 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
(Light Manufacturing)

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/ day	Prod. Cost/ day	Prod. Cost/ month	Prod. Cost/ 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/ day	Qty/yr	@	Pdn Cost/ 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 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
(Light Manufacturing)

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 Item	Units	@	Qty/ day	Pdn cost/day	Pdn cost/ mth	Pdn cost/yr
Direct Costs						
Rubber sheets	kgs	30	16	481	12503.4	150,041
Sulphur	kgs	16	0.32	5.12	133.12	1,597
other chemicals	ltrs	7.5	0.16	1.2	31.2	374.4
Packing 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/ day	Qty/yr	Unit cost	Pdn cost/ yr	UPx	TR
Dehydrated fruits	2,000	624,000	0.3	164,779	0.3	174,720

Profitability Analysis in US$

Profitability Item	Per day	Per 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
(Light Manufacturing)

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 8hr.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 25mm, Press 460*610mm, 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 machine	No	1	12,500	12,500
Paper and board cutting machine	No	1	9,800	9,800
Wire stitching machine	No	1	3,490	3,490
Offset printing Machine with 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/ day	cost/ day	cost/ mth	cost/ year
Direct Costs						
Reams of Paper (size A3)	No	5	16	80	2080	24960
Craft Paper in different colours (for 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

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/ day	Qty/Yr	@	Pdn cost/Yr	UPx	T/rev
Exercise books of 96 pages	2,000	624,000	0.3	174,231	3	1,872,000

Project Analysis in US$

Profitability Item	Per day	Per 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
(Light Manufacturing)

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/ day	Pdn cost/day	Pdn cost/ mth	Pdn 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) Production costs assumed are for 312 days per year with daily capacity of producing 105 pieces of cotton bags.

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 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/ day	Qty/ yr	@	Pdn cost/yr	UPx	T/rev
Designer Cotton Bags	105	32,760	3.10	80,134	4.4	144,144

Profitability Analysis Table

Profitability Item	Per Day	Per 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
(Light Manufacturing)

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 99,840kgms of scouring powder in the first year of operation and a total annual revenue of US$53,914can 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

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/yr
Direct Costs						
Salt	Kgs	0.4	16	6	167	2,000
Borax Powder	Kgs	0.35	32	11	292	3,500
Baking Soda	Kgs	0.4	32	13	333	3,994
Packaging Materials	Pcs	0.08	160	13	333	4,000
Other 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 320kgs 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/ yr	UPx	T/rev
Scouring 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 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
(Light Manufacturing)

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 5,000pieces 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 Item	Units	@	Qty/ day	Pdn cost/day	Pdn cost/ mth	Pdn cost/Yr
Direct Costs						
Wall Paper Samples	Mtrs	1.5	20	30	780	9,360
Bonded Paper	Mtrs	2	34	68	1768	21,216
Decorative Paper	Mtrs	10	22	220	5720	68,640
Printer Paper	Reams	1.5	10	15	390	4,680
Glue	Ltrs	4	3	12	312	3,744
Old Calendars Pictures	Mtrs	2	5	10	260	3,120
Other 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 cost/yr	UPx	T/rev
Paper 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
(Light Manufacturing)

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	@/ day	Qty/ day	Prod. Cost/ day	Prod. Cost/ month	Prod Cost/ 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 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
Plain Serviettes	70	21,840	3	66,271	4	87,360
Decorated 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 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
(Light Manufacturing)

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	@/ day	Qty/ day	Prod. cost/ day	Prod. Cost/ month	Prod. 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/ day	Qty/ yr	@	Prod. Cost /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
(Light Manufacturing)

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/ day	Prod. Cost/ day	Prod. Cost/ month	Prod. Cost/ Year
Direct Costs						
Compounded 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	@$	Pdn Cost/yr$	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
(Light Manufacturing)

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	@/ day	Qty/ day	Prod. cost/ day	Prod. Cost/ month	Prod. Cost/ year
Plastics/scrap	tones	250	1	250	6,500	78,000
Chemicals (PVC/ 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 production of the product

Project product costs and Price structure $

Item	Qty/ day	Qty/ yr	@	Prod. Cost /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
(Light Manufacturing)

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	@/ day	Qty/ day	Pdn Cost/ day	Pdn Cost/ month	Pdn Cost/ Year1
Direct costs3:						
MS Rounds	Kgs	8	100	400	10,400	124,800
Pickling Chemicals	Kgs	7	20	140	3,640	43,680
Packaging 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 Costs	613	15,948	191,378
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
(Light Manufacturing)

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/ dy	Cost/ 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/ 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 costs	1,568	40,770	489,236
Profit	182	4,730	56,765

Sources of Supply of Machinery, Equipment and Raw 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
(Light Manufacturing)

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$ 234,000 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	@/ day	Qty/ day	Cost/ day	Cost/ month	Cost/ 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 (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/ day	Qty/ year	@	Prod./ year	UPx	Revenue
Saloon car	5	1,560	134.97	210,555	150	234,000

Profitability Analysis

Profitability item	Per day	Per 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
(Light Manufacturing)

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 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	@/ day	Qty/ day	Cost/ day	Cost/ month	Cost/ year
Direct Costs						
Turned leather	Kg	0.8	50	40	1,040	12,480
Dye	ltrs	0.5	20	10	260	3,120
Water	ltrs	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/ day	Qty/yr	@	Prodn/ 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

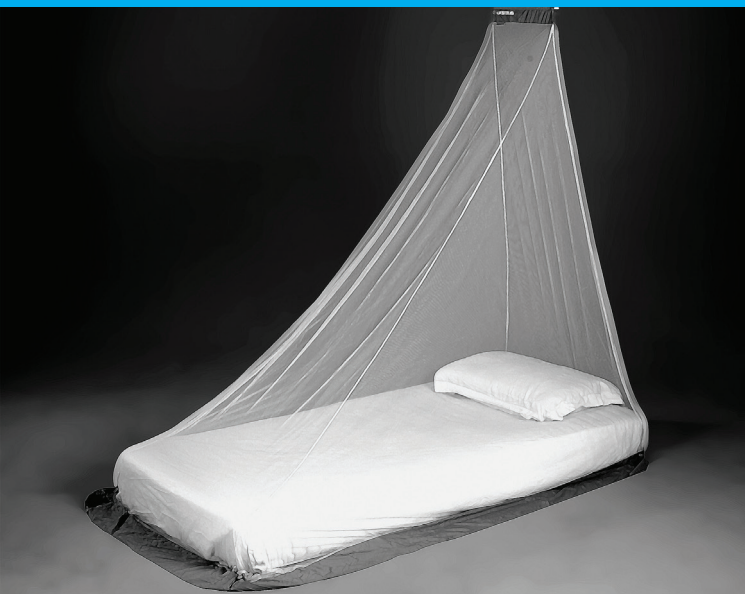
Sources of Supply of Machinery and Equipment and Raw Materials

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
(Light Manufacturing)



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	@/ day	Qty/ day	Cost/ day	Cost/ month	Cost/ 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/ 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
(Light Manufacturing)

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/ day	Pdn cost/ mth	Pdn 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
(Light Manufacturing)

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 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.
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 $

Cost Item	Units	@	Qty/ day	Pdn cost/day	Pdn cost/ mth	Pdn cost/ yr
Direct Costs						
Pyrethrum	Kgms	2	3	6	156	1,872
Deodar sawdust	ltrs	2.2	0.2	0.44	11.4	137.28
Maida wood bark	ltrs	1.3	0.13	0.169	4.3	52.72
pyrethrum oleoresin	Pkts	1.5	31	46.5	1,209	14,508
Citronella oil	ltres	2.4	0.32	0.768	20.1	240
Benzoic acid	ltres	90	0.16	14.4	374	4,493
Packaging boxes	kgs	3.6	3	10.8	281	3,370
Other materials / 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 / day	Qty /yr	@	Pdn cost/ yr($)	UPx	TR($)
Mosquito Coils	4,500	1,404,000	0.2	280,800	0.3	84,240

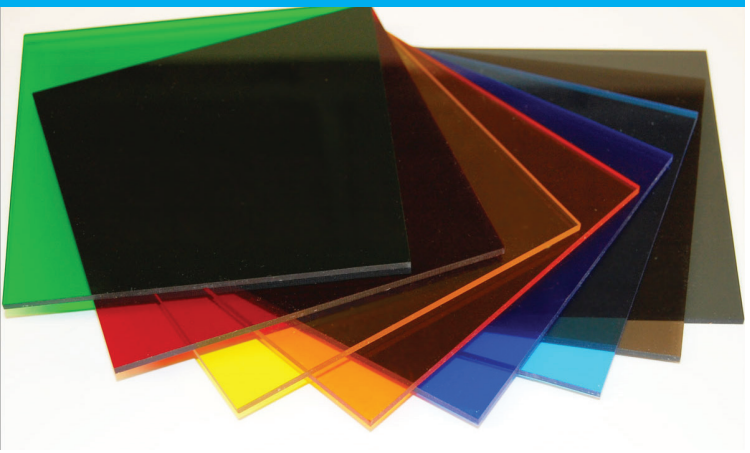
Profitability Analysis in US $

Profitability Item	Per day	Per month	Per year
Revenue	270	7,020	84,240
Less: Production and operating 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
(Light Manufacturing)



MAKING ACRYLIC SHEETS

Introduction

Acrylic sheet are used in manufacturing of scales, set square stencils, transparent covers of instruments, neon and fancy lighting signboards, fancy tables, storage boxes, floppy diskette, shelves for audio cassettes and other novelty items. They have good weather resistance with highly durable optical clarity, high strength-to-weight ratio, good dimensional stability, good thermo-formability, etc. it costs US$ 15950 with a capacity 31200kg 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 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 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/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ yr
Direct Costs						
Acrylic scrap	kgs	70	3.21	225	5842	70,106
Methyl methacrylate monomer	ltrs	45	0.16	7.2	187.2	2,246
Benzyl peroxide	ltrs	37	0.1	3.7	96.2	1154.4
calcium chloride	kgs	20	0.96	19.2	499.2	5,990
Pearl essence& Colour	ltrs	7	0.22	1.54	40.04	480.48
Stearic acid	ltrs	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/ day	Qty/ yr	@	Pdn 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 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
(Light Manufacturing)

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 46800kgs per month which translates into 3900kgs 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/ day	cost/ day	cost/ month	cost/ 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/ 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 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
(Light Manufacturing)

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 Item	Units	@/ day	Qty/ day	Pdn cost/day	Pdn cost/ mth	Pdn cost/yr
Direct Costs						
Cotton Yarn	Mtrs	0.21	19.2	4	105	1259.9
Nylon Yarn	Mtrs	0.6	25.6	15	400	4,800
Chemicals	Ltrs	45	0.16	7.2	187	2,246
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 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
(Light Manufacturing)

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	@/ day	Qty/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ 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 into production of the product

Project product cost nd Price structurein US

Item	Qty/ day	Qty/ yr	@	Pdn cost /yr	UPx	TR
Bicycle carrier seats	140	43,680	2.13	93,038	2.3	213,988

Profitability analysis in US $

Profitability Item	Per day	Per 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
(Light Manufacturing)

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	@/ day	Qty/ day	Cost/ day	Cost/ month	Cost/ yr
Direct Costs Cutting 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/ day	Qty/yr	@	Prodn/ year	UPx	Revenue
Jewerly 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
(Light Manufacturing)

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 kgs of cleaning powder annually. The revenue potential is estimated at US$ 255,840per 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 left 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/ day	Pdn Cost/ day	Pdn Cost/ mth	Pdn 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 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 / day	Qty/yr	@	Pdn/yr	UPx	Total revenue
Cleaning powder	50	15,600	13.32	207,829	16.4	255,840

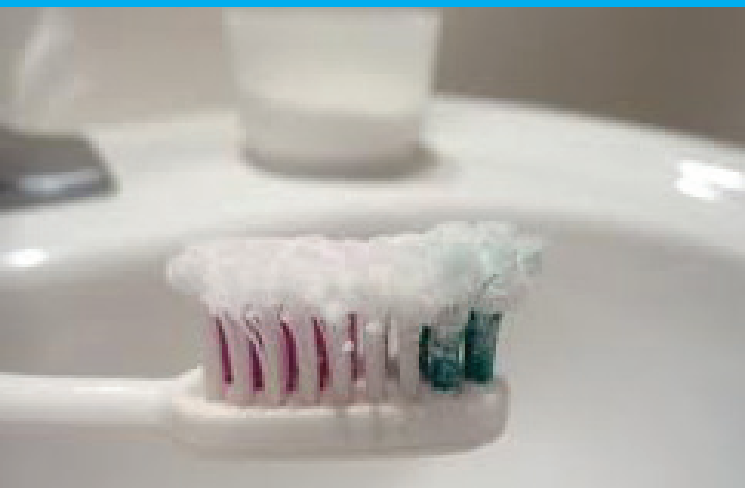
Profitability Analysis Table

Profitability Item	Per day	Per Month	Per Year
Revenue	820	21,320	255,840
Less: Production and Operating 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
(Light Manufacturing)



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$62,400per year with a net profit of 51% and a payback period of 2 years and 5 months. The total investment cost of US$15,555per 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 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	@/ day	Qty/ day	Pdn cost / day	Pdn cost/ month	Pdn cost 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	ltrs	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 / day	Qty /yr	@	Pdn / 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 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
(Light Manufacturing)

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.

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$

Direct Materials, Supplies and Costs

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ yr
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 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/ day	Qty/yr	@	Pdn cost/ yr	UPx	T/rev
Woolen 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
(Light Manufacturing)

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 26,000decorated glasses per month, which translates into 312,000glasses 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 multi-coloured 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°C-550 °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, 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/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ 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 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/ day	Qty/Yr	@	Pdn cost/Yr	UPx	T/rev
Decorated Glass 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
(Light Manufacturing)

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$589,056per 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/ day	Pdn cost / day	Pdn cost/ month	Pdn cost/yr
Cement	Kg	10.6	100	1,060	27,559	330,720
Paint	ltrs	18	20	360	9,360	112,320
Oil	ltrs	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/ day	Qty / yr	@	Pdn cost /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
(Light Manufacturing)

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:

- 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 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/ day	Prod. Cost/ day$	Prod. Cost/ mth$	Prod. Cost/ 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/ yr	@$	Pdn Cost/ 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
Less: Production & 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
(Light Manufacturing)

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 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/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Direct Costs						
Hawai Rubber 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 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 production Costs and Price Structure

Item	Qty/day	Qty/Yr	@	Pdn cost/Yr	UPx	T/rev
Bathroom 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 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
(Light Manufacturing)

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 lb (45 kg) in size.

Capital Investment Requirements in US$

Capital Investment Item	Units	Qty	@$	Amount $
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/ day	Prod. Cost/ day$	Prod. Cost/ month$	Prod. Cost/ 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/ dayLtrs	Qty/yr	@$	Pdn Cost/ yr$	UPx	T/rev
Rubber 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
(Light Manufacturing)

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 margin12% 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	-	-	410
Total				22,438

Production and Operating Costs

(a)Direct materials, Supplies and Costs

Cost Item	Units	@	Qty/day	Pdn cost/ day	Pdn cost/ mth	Pdn 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 1,000litres 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/ day	Qty/yr	@	Pdn cost/ 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
(Light Manufacturing)

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 42,680US$, with operating costs of 100,041US$, and an estimated revenue of 125,424US$ 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/ day	Pdn cost/ day	Pdn cost/ mth	Pdn 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 materials	Pcs	1.9	5	9.5	247	2,964
Magazines Other 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/ day	Qty/yr	@	Pdn cost/yr	UPx	T/rev
Decorated Ceramic Ware	60	18,720	5.3	100,041	6.7	125,424

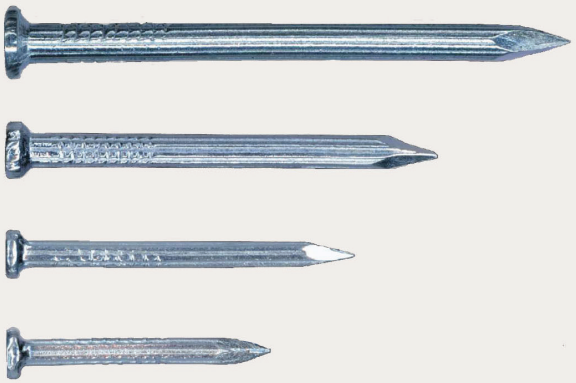
Profitability Analysis Table

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
(Light Manufacturing)



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 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 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 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 cost	Qty/ day	cost/ day	cost/ month	cost/ 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/ day	Qty/yr	Unit cost	Pdn cost/day	Unit cost	T/rev
Wire Nails of 3 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 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
(Light Manufacturing)

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/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ 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 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/Yr	@	Pdn cost/Yr	UPx	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 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
(Light Manufacturing)

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	Units	@ day	Qty/ day	Pdn Cost/ day	Pdn Cost/ mth	Pdn Cost/ Year1
Direct costs3						
Card Boards	No	0.58	200	116	3,016	36,192
Staples	Boxes	0.42	5	2.1	55	655
Fixing Materials	Boxes	0.23	10	2.3	60	718
Ruler and 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 cost	Pdn cost/ yr	UPx	T/rev
Small boxes	60	18,720	0.25	4,680	0.49	9,173
Medium Boxes	60	18,720	0.75	14,040	1.27	23,774
Large Boxes	80	24,960	1.5	37,440	2.3	57,408
Total	200	62,400		56,160		90,355

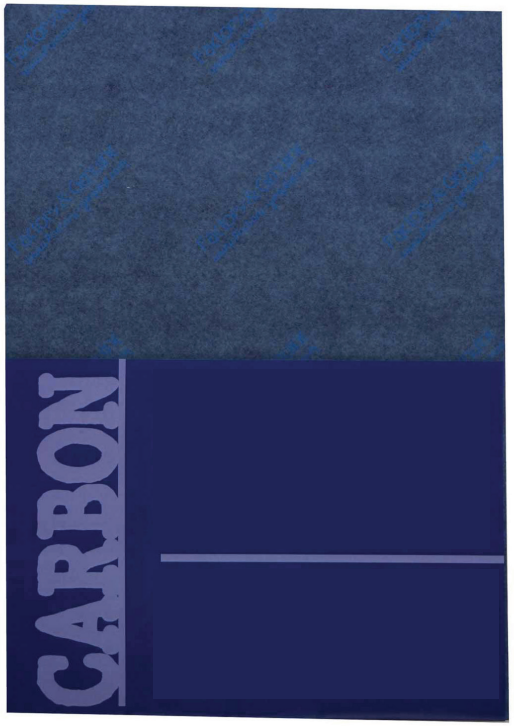
Profitability Analysis Table

Profitability Item	Per day	Per Month	Per Year
Revenue	289.6	7,530	90,355
Less: Production and Operating 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
(Light Manufacturing)



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 Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/yr
Papers	Grams	2.6	500	1,300	33,800	405,600
Dyes and waxes	Ltrs	4.5	10	45	1,170	14,040
Oil	Ltrs	4	4	16	416	4,992
Sub-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/ day	Qty/yr	@	Pdn cost /yr	UPx	TR
Carbon 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 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
(Light Manufacturing)

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$, and operating costs of 175,817US$ used to produce 11,856 liters of nail polish to realize 330,439US$ of 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	@ day	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn 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 (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. 1) Production costs assumed are for 312 days per year with daily production capacity of 38 litres of nail polish.
2. 2) Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3. 3) Direct costs include: materials, supplies and other costs that directly go into production of the product.
4. 4) Total monthly days assumed are 26-work days.
5. 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/ day	Qty/yr	@	Pdn 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 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
(Light Manufacturing)

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 Item	Units	Qty	@	Amount
Over lock stitching machine 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/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Direct Costs						
Knitted fabric	meter	1.5	175	262.5	6,825	81,900
Internal 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 boxes	No	0.5	10	5	130	1,560
Packing 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/ Yr	UPx	T/rev
Cotton knitted 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 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
(Light Manufacturing)

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/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/yr
Direct Costs						
Clay &Stone dust	Kgs	0.028	128	3.6	93.1	1,118
Felspar Silica, vanaculanite	Kgs	18	7	126	3276	39,312
Water & Other materials	Kgs	0.005	4,000	20	520	6,240
Packaging 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 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
(Light Manufacturing)

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/ day	Prod Cost/ day	Prod. Cost/ month	Prod. Cost/ 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/ day	Qty/yr	@$	Pdn 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
(Light Manufacturing)

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	@/ day	Qty/ day	Prod. Cost/ day	Prod. Cost/ month	Prod Cost/ 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 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 / day	Qty/ yr	@	Pdn/ yr	UPx	T/ 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 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
(Light Manufacturing)

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/ day	Pdn Cost/ day	Pdn Cost/ mth	Pdn Cost/ yr
Direct Costs						
Agro waste &waste 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 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.

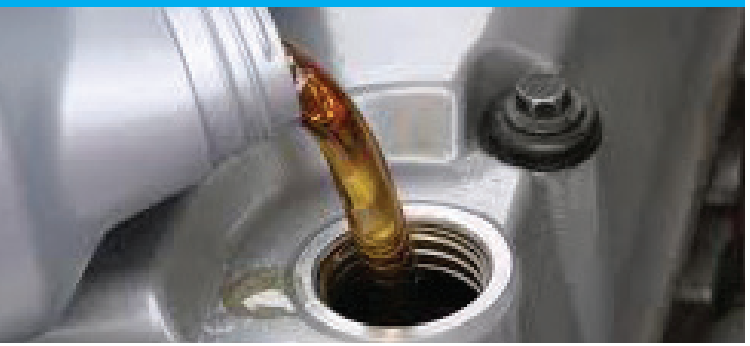
Project Product Costs and Price Structure

Item	Qty/ day	Qty/yr	@	Pdn Cost/ yr	UPx	Total 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 Costs	1,044	27,136	325,635
Profit	556	14,464	173,565

Trade Sector
(Light Manufacturing)



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/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Direct Cost						
Used lube oil	Ltrs	0.7	80	56	1,456	17,472
Concentrated Sulfuric 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/ day	Qty/ Yr	Unit cost	Pdn/Yr	Unit px	T/rev
Refined Lubricating 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 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
(Light Manufacturing)

MAKING POWER INVERTORS

Introduction

The business idea is for making and marketing of Power Invertors. This business idea is premised on production of 15Invertors 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. cost	Prod. Cost/ month	Prod. Cost/ 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 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 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
(Light Manufacturing)

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 Item	Units	Qty	@	Amount
Sheet cutting machine	No	1	4,300	4,300
Pneumatic wire shooting 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 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 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/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Direct costs	No	50	10	500	13,000	156,000
Cellulose Nitrates	No	37	5	185	4,810	57,720
Cellulose Acetate Sheets of 4mm to 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/ 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 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.

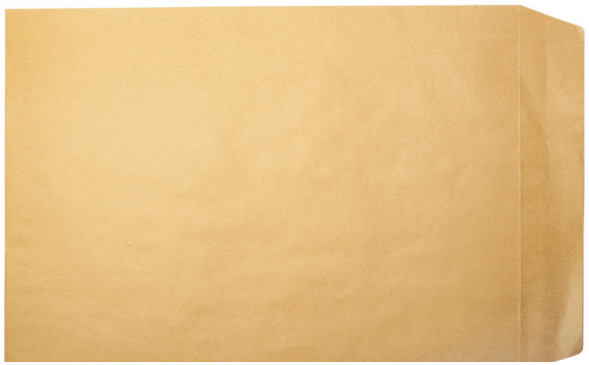
Market Analysis

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
(Light Manufacturing)



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 50,000Kgs 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/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ yr
Direct Costs						
LLDPE	Kgms	7	13	88	2,275	27,300
Filter & pacifiers	Kgms	100	1	50	1,300	15,600
Terpene	Ltrs	30	1	30	767	9,204
Other materials / 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/ day	Qty/ yr	@	Pdn 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 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
(Light Manufacturing)

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 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 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 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 un-reacted 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 mother liquor is re-circulated to the evaporator. The crystals are then packed and marketed.

Production and Operating Expenses

Cost Item	Units	@/ day	Qty/ day	Pdn Cost/ day	Pdn Cost/ month	Pdn Cost/ 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 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 / 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 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.

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