Agriculture Sector

SETTING UP A CHICKEN HATCHERY

Introduction

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

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

Process Description

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

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

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

General costs (Overheads)

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

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

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

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

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

Market Demand

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

Government Incentives Available:

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

Equipment Suppliers

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

Risk

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

Agriculture Sector

BEE KEEPING (APICULTURE)

Introduction

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

Process Description

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

Capital Investment Requirements in US Dollars

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

Production and Operating Costs in US$

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

General costs (Overheads)

Utilities (power)	15	180
(Utilities (water)	15	180
Salaries	50	600
Sub-total	80	960
Total Operating costs	236	2,832

Production assumed 4 quarters per year

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

Project product cost and Price structure in US$

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

Profitability analysis in US$

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

Market Demand

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

Government Incentives Available:

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

Source of Information:

Ugandan Beekeepers Association

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

Risk involved in the Business:

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

Agriculture Sector

PIGGERY

Introduction

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

Technology and processes description

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

Scale of Investment

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

Production and Operating Costs in US $

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

General costs (Overheads)

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

Production is assumed for 365 days per year.

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

Project product Costs and Price Structure in US $

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

Profitability Analysis Table

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

Sources of supply of equipments

All equipments and raw materials can be got in Uganda.

Market Analysis

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

Risk:

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

Agriculture Sector

MAKING CORNFLAKES

Introduction

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

Manufacturing Process

Maize grains are cleaned using air classifiers and after separated (large and small grains) using a mesh screen separator. The grains are then polished and milled to remove germs and bran. The milled grains are cooked in a rotary steam cooker where flavor syrups of sugar, malt, salt, and water are added. The grain pieces are then washed and small grains are separated.

The grains are then carried to an agitator pump or lump breaker then sent to a steamer where pre-heated air is blown into the grains so as to reduce the moisture content to the desired level of about 20%. The dried material is then kept in a de-moisturizing tank for a few hours for moisture to equally be distributed. The grits (cooked material) are then washed again and passed through a heavy flaking machine where they are turned into flakes by pressing. The flakes are immediately transferred to a rotary oven for roasting. After roasting, the flakes are inspected, screened and graded to remove standard flakes. The flakes are then packed in water resistant polythene containers of waxed paper.

Scale of Investment

Capital Investments Requirements

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

Production and Operating Costs

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

General costs (Overheads)

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

Production is assumed for 312 days per year.

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

Project product Costs and Price Structure in US$

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

Profitability Analysis

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

Sources of Equipment

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

Government facilities and incentives

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

Risk:

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

Agriculture Sector

ESTABLISHING A GRAIN GROCERY

Introduction

Grains are agricultural products that have a very high demand in the country. They usually include: Simsim, ground nuts, soy beans, maize, popcorns, and cow peas.

The project idea is based on adding value by packaging good quality grains and selling them at relatively low prices. The project expects to package 72,000 kgs of assorted grains per annum. Initial investment costs are estimated at US$20,370 generating revenue of US$92,695 at a net profit margin of 43% and payback period of approximately 2 years.

Capital Investment Requirements in US$

Capital investment item	units	Qty	@	Total
Motor truck(4 tones)	No	1	14,000	14,000
Furniture & Fittings	No	1	2,000	2,000
Packing machine	No	1	1,000	1000
Grading machine	No	1	1,000	1000
Grain cleaning machine	No	1	1,200	1200
Dust woofers	No	2	400	800
Weighing scale	No	1	370	370
Total				20,370

Production and Operating Costs in US$

Cost Item	Units	@	Qty per day	Pdn cost per day	Pdn cost/ month	Pdn cost/ year
Direct Overheads:						
G. nuts	Kgs	0.8	71	56.8	1,476.8	17,722
Soy beans	Kgs	0.3	32	9.6	249.6	2,995
Pop corn	Kgs	0.3	64	19.2	499.2	5,990
Cow peas	Kgs	0.3	64	19.2	499.2	5,990
Packaging material	Pcs	0.05	300	15	390	4,680
Sub-total			531	120	3,115	37,377

General Costs (Overheads):

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

1) Production costs assumed 312 days per year with daily capacity of packing 231kgs of grains.
2) Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3) Direct costs include: materials, supplies and other costs that directly go into packaging of the grain.
4) Total monthly days assumed are 26-days.
5) The valuation currency used is United States Dollars.

Market Analysis

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

Project Product Costs and Price Structure

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

Profitability Analysis Table

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

Government Facilities and Incentives

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

Risk

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

Agriculture Sector

MAKING INSTANT COFFEE POWDER

Introduction

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

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

Production Process

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

Capital Investment Requirements

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

Production and Operating Costs

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

General costs(Overheads)

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

1) Production costs assumed 312 days per year with daily capacity of producing 25kgs of instant coffee powder.
2) Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3) Direct costs include: materials, supplies and other costs that directly go into production of the product.
4) Total monthly days assumed are 26-days.
5) The valuation currency used is United States Dollars.

Project Product Costs and Price Structure

Item	Qty/ day	Qty/yr	@	Pdn Cost/yr	UPx	Total Rve
Instant Coffee	400	124,800	0.5	64,841	0.93	116,064

Profitability Analysis Table

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

Market Analysis

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

Government Incentive

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

Agriculture Sector

MAKING BANANA WAFERS

Introduction:

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

Production,Capacity and Technology:

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

Capital Investment Requirement in US $:

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

Production and Operating Costs in US $

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

General Costs (Overheads)

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

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

Project Product cost and Price Structure in US $

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

Profitability Analysis in US$

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

Market

Banana wafers are common among the urban population. With an increased shelf life, the wafers can be supplied to supermarkets, schools, hotels, hospitals, and with aggressive marketing, they can capture a lot of consumer attention even in the international market. They can also be produced in different styles or designs.

Source of Equipment and Raw Materials:

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

Agriculture Sector

ICE CREAM MAKING

Introduction:

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

Production, Capacity and Technology

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

Capital Investment Requirement in US $

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

Production and Operating cost in US$

Cost Item	Units	@	Qty/ day	Pdn cost/day	Pdn cost/ month	Pdn cost/ year
Direct Costs of materials and supplies						
Milk (solid/ fat)	Kgs	2.25	38	85.5	2,223	26,676
Sugar,	Kgs	1	10	10	260	3,120
Flavourings, Candies & fruits	Kgs	3	2	6	156	1,872
Stabilizers / emulsifiers	Kgs	2	0.16	0.32	8	100
Eggs	Trays	2	2	4	104	1,248
Sub-total				106	2,751	33,016

General Costs (Overheads)

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

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

Project product cost and Price Structure in US$

Item	Qty/day	Qty/ year	@	Pdn cost/yr	UPx	TR
Ice Cream	123	38,376	1.53	58,866	2.8	107,453

Profitability analysis in US$

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

Market

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

Source of Equipment and Materials

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

Government facilities

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

Risk

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

Agriculture Sector

PUTTING UP AN ANIMAL FEED PLANT

Introduction

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

Plant Capacity

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

Production Process

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

Scale of Investment

Capital Requirements in US$

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

Production and Operation Costs in US$

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

General Costs (Overheads)

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

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

Project Product Costs and Price Structure

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

Profitability Analysis Table

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

Market Analysis

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

Agriculture Sector

DOG BREEDING (GERMAN SHEPHERDS)

Introduction

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

Production Capacity

This farm will be capable of producing 50 dogs in a period of six months.

Capital Investment Requirements and Equipment

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

Market Analysis

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

Project Costs

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

Capital Investment Requirements in US$

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

Operating Costs

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

General Costs (Over heads)

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

Project Product Costs & Price Structure

Item	Qty/three months	Qty/yr	@$	Pdn Cost/yr$	UPx	T/rev
Puppies	50	15,600	4.02	62,782	14	218,400

Profitability Analysis

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

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

Sources of Supply of Raw Materials:

Raw materials will be locally sourced from Farmers who have already invested in the sector, Animal Husbandry Research Organizations & Centers in Uganda.

Government Facilities and Incentives Available:

The following incentives are available from Government in her bid to promote Agriculture: tax exemptions, basic infrastructure, and liberalized market.

Agriculture Sector

ESTABLISHING A COFFEE CAFFEINE PROCESSING PLANT

Introduction

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

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

Production Capacity

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

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

Market Analysis

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

Project Costs:

Capital Investment Requirements in US$

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

Operating Cost in US$

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

General Costs (Over heads)

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

Project Product Costs & Price Structure

Item	Qty/ day (mg)	Qty/yr	@$	Pdn Cost/ yr$	UPx	Total / revenue
Caffeine	10,000	3,120,000	0.1	300,886	0.2	655,200

Profitability Analysis in US$

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

Raw Material Availability

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

Government Facilities and Incentives Available

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

Risk

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

Agriculture Sector

ESTABLISHING A DAIRY FARM

Introduction

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

Production Capacity

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

Capital Investment Requirements and Equipment

This project will be operated locally on small scale, i.e. 5 Friesian Cows operated on 5 acres of land. The Fixed Capital Investment required to start this project is approximately US$ 73,521, generating a revenue potential of USD 374,400 per annum. The net profit margin is 6% with a payback period of 2 years.

Market Analysis

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

Capital Investment in US$

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

Production and operation costs in US $

Item	Units	@	Qty/ day	Prod. Cost/ day	Prod. Cost/ month	Prod. Cost/Year
Direct Costs						
Feeds	Kgs	0.78	500	390	10,140	121,680
Drugs	M/gs	21.5	5	107.5	2,795	33,540
Calcium/ Salt	Kgs	0.6	10	6	156	1,872
Water	Litres	0.0028	600	1.68	43.7	524
Sub total				505.18	11,746	140,946

General Costs (Over heads)

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

Project product costs and Price structure in US$

Item	Qty/day	Qty/yr	@$	Pdn Cost/yr$	UPx	Total /rev
Milk	3000	936,000	0.16	152,303	0.4	374,400

Profitability Analysis table

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

Sources of Supply of Raw Materials

All raw materials and equipments are imported.

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

Agriculture Sector

FRUIT JUICE CANNING

Introduction

Fruit Juice Canning is a method of preserving fruit juice sealed in an airtight container, which prevents microorganisms from entering and proliferating inside. The products may include: Canned fruit cocktail consisting of a mixture of fruits, such as; mangoes, tangerine, lemons, apples, and passion fruits. There is an increasing demand for canned fruits as they can be sold in both local and foreign markets.

Production Capacity

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

Production Technology & Process

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

Capital Investment Requirements and Equipment: This project may be operated on both small and large scale depending on the size and nature of the market. The fixed capital investment required to start it is approximately 27,170 USD as shown in the table below:

Raw Material Requirements for 12 Months: It is projected that in a month, at least 42,000 kgs of fruits, 36,000 jar cans & labels are required to meet the projected production capacity. The revenue per annum is USD 748,800, with an operating cost of USD 656,473 at a net profit of 12%. The payback period is 4 months.

Market Analysis

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

Project Costs:

Capital Investment Requirements in US$

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

Operating Costs in US$

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

General Costs (Over heads)

Rent	400	4,800
Packaging Material	500	6,000
Labour	800	9,600
Utilities (Power & Gas)	1,000	12,000
Repair & Servicing	500	6,000
Fuel	500	6,000
Depreciation(Asset write off) Expenses	566	6,793
Sub – total	4,266	51,193
Total Operating Costs	54,706	656,473

Project Product Costs & Price Structure in US

Item	Qty/day	Qty/yr	@$	Pdn Cost/yr$	UPx	T/rev
Canned Juice	1200	374,400	1.75	656,473	2	748,800

Profitability Analysis in US$

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

Sources of Supply of Raw Materials:

Raw materials will be locally supplied from Eastern, Western – Kasese, North Eastern, and Central parts of Uganda, which are the leading and major fruit producing regions.

Government Facilities and Incentives Available:

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

Agriculture Sector

MAKING VERMI-COMPOST

Introduction

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

Production, Capacity and Technology

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

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

Capital Investment Requirement in US $

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

Production and Operation costs

Direct materials, supplies and costs

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

General Costs (Overheads)

Labour	300	3,600
Selling & distribution	50	600
Utilities (Water, power)	200	2,400
Rent	25	300
Miscellaneous expenses	100	1,200
Depreciation	77	920
Sub-total	752	9,020
Total Operating Costs	877	10,523

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

Project product costs and Price Structure in US $

Item	Qty/day	Qty/year	Unit cost	Pdn cost/yr	UPx	TR
Compost manure	11.5	3,588	2.9	10,523	3.2	11,482

Profitability Analysis in US $

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

Market

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

Suppliers of Plant and machinery

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

Government incentive

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

Agriculture Sector

VERMI-CULTURE

Introduction

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

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

Production Process, Capacity and Technology

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

Capital Investment Requirement in US $

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

Production and Operation costs in US$

Direct materials, supplies and costs

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

General Costs (Overheads)

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

1. Production costs assumed are for 312 days per year with daily capacity of 1.15 kgs
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and all other costs incurred to produce the product.
4. A production month is 26 work days
5. Currency used is US Dollars.

Project product costs and Price Structure

Item	Qty/day	Qty/ year	Unit Cost	Pdn cost/ yr	UPx	TR
Worms	1.15	359	78	28,129	81	29,063

Profitability Analysis in US$

Market

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

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

Suppliers of Equipment and Materials

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

Agriculture Sector

MAKING ICE CANDY

Introduction

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

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

Production process

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

Capital investment in US$

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

Production and operating costs in US $

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

General costs(overheads)

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

1. Production costs assumed 312 days per year with a daily capacity of 15000 packets of ice candies
2. Depreciation (fixed assets write off) assumes 4 years life of assets written off at 25% per year for all assets
3. Direct costs include materials, supplies and other costs that directly go into production of the product.

Project product costs and Price structure

Item	Qty /day	Qty/yr	@	Pdn cost /yr	UPx	TR
Ice candies	15,000	4,680,000	0.14	683,968	0.2	936,000

Profitability Analysis in US $

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

Market Analysis

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

Sources of Raw Materials and Equipment;

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

Government Facilities and Incentives

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

Agriculture Sector

SERICULTURE

Introduction

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

Production Capacity

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

Technology and Processes Description

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

Capital Investment Requirements

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

Production and Operating Expenses

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

General costs (Overheads)

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

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

Project Product Costs and Price Structure

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

Profitability Analysis Table

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

Sources of supply of Equipments

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

Market analysis

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

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

Agriculture Sector

MAKING POWDER MILK

Introduction

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

Production Process

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

Tools and Equipment in US$

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

Production and Operating Costs in US $

Direct Materials, Supplies and Costs

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

General costs (Overheads)

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

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

Product Cost and Price Structure in US$

Item	Qty/ day	Qty/ year	@	Prod. Cost / year	UPx	Total Revenue
Powder milk	2,000	624,000	4.9	3,082,729	5	3,120,000
				3,082,729		2,496,000

Profitability Analysis in US$

Profitability item	per day	per month	per year
Revenue			
Powder milk	10,000	260,000	3,120,000
Less Production & Operating Costs	9,881	256,894	3,082,729
Profit	119	3,106	37,271

Government Incentive

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

Market

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

Suppliers of Plant and Machinery

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

Agriculture Sector

MAKING DECORTICATED CASHEWNUT

Introduction

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

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

Production Process

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

Production Capacity

The plant can have a capacity of 9000 kgs per year

Land Requirement

Rent for a year would cost about 1,200 US Dollars

Capital Investment Requirements In USD

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

Production and Operating Costs in US $

Direct Materials, Supplies and Costs

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

General costs (Overheads)

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

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

Project Product Cost and Price Structure in US$

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

Profitability Analysis in US$

Profitability item	per day	per month	per year
Revenue			
Cashew nuts	250	6,500	78,000
Less Production & Operating Costs	178	4,633	55,594
Profit	72	1,867	22,407

Market

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

Government Incentives

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

Equipment Suppliers

Equipment can be imported from Asia and Europe.

Agriculture Sector

BUSINESS IDEA FOR MAKING COCONUT CREAM

Introduction

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

Production Process

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

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

Capital Investment Requirement in US$

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

Production and Operating Costs

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Direct Costs						
Coconuts	No	0.94	11,538	10,846	281,989	3,383,865
Flavor	kg	1	200	200	5,200	62,400
Fat	kg	0.62	150	93	2,418	29,016
Protein	kg	0.7	50	35	910	10,920
Sugars	kg	1	70	70	1,820	21,840
Water	ltrs	0.004	2,000	8	208	2,496
Pack materials	No	0.19	3,000	570	14,820	177,840
Sub-total			17,008	11,822	307,365	3,688,377

General Costs(Overheads)

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

Project Product Costs and Price Structure in US$

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

Profitability Analysis in US$

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

Market Analysis

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

Availability of Raw Materials and Equipments

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

Agriculture Sector

CREAM SEPARATION PLANT

Introduction

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

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

Technology and production process

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

Capital Investment Requirements

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

Production and Operating Expenses

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

General costs (Overheads)

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

Depreciation (Asset write off) Expenses

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

Production is assumed for 312 days per year.

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

Project Production Costs and Price Structure

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

Profitability Analysis Table

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

Market Analysis

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

Sources of supply of equipment

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

Government Facilities and Incentives

The government is encouraging any value added agricultural produce.

Agriculture Sector

BAKING BISCUITS

Introduction

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

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

Production process

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

Capital Investment Requirements in US$

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

Production and Operating costs in US$

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

General costs(overheads)

Utilities(water and power)	50	600
Labour	50	600
Rent	125	1,500
Miscellaneous costs	50	600
Depreciation(Asset (write off)Expenses)	657	7,888
Sub –total	932	11,188
Total Operating Costs	10,139	121,667

Production costs assumed 312 days per year with a daily capacity of 9000 biscuits

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

Project product Costs and Price Structure in US$

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

Profitability Analysis

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

Market Analysis

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

Sources of raw materials:

Raw materials are locally available.

Government Facilities and Incentives

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

Agriculture Sector

BUSINESS IDEA FOR ESSENTIAL OIL PRODUCTION

Introduction

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

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

Production Process and Capacity

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

Capital Investment Requirements in US$

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

Production and Operating Costs in US$

(a)Direct materials, Supplies and Costs

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

General Costs (Overheads)

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

1. Production costs assumed 312 days per year with daily capacity of producing 600 litres of essential oil.
2. Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and other costs that directly go into production of the product.
4. Total monthly days assumed are 26-days.
5. The valuation currency used is United States Dollars.

Market Analysis

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

Project Product costs and Price Structure

Item	Qty/ day	Qty/yr	@	Pdn Cost/ yr	UPx	Total Rve
Essential Oil	600	187,200	1.5	288,803	2.7	505,440

Profitability Analysis Table in US$

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

Government Facilities and Incentives

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

Agriculture Sector

NEEM OIL EXTRACTION

Introduction

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

Plant Capacity

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

Production Process

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

Scale of Investment

Capital Investment Requirements in US$

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

Production and Operation Costs in US$

Cost Item	Units	@	Qty/ day	Pdn Cost/ day	Pdn Cost/ mth	Pdn Cost/ Year1
Direct costs3:						
Neem seed	Kgs	15	100	1500	39,000	468,000
solvent	Litrs	10	5	50	1300	15,600
Packing materials	No	0.1	150	15	390	4,680
Subtotal					40,690	488,280

General costs (Overheads)

Labour	300	3,600
Utilities	300	3,600
Selling and Distribution	100	1,200
Administrative expenses	150	1,800
Shelter	300	3,600
Depreciation (Asset write off) Expenses	131	1,575
Sub-total	1,281	15,375
Total Operating Costs	41,971	503,655

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

Project Product Costs and Price Structure

Item	Qty / day	Qty/yr	@	Pdn/yr ($)	UPx	T/rev($
Neem oil	200	62,400	8.1	503,655	9	561,600
Total		62,400		503,655		561,600

Profitability Analysis Table

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

Market Analysis

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

Agriculture Sector

UREA-MOLASSES MULTI -NUTRIENT BLOCK

Introduction

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

Process and Production Capacity

Preparation of the ingredients is done before the whole process starts. The mixing is done in a clear sequence –Molasses are put first, then Urea is added, followed by Salt and Minerals, Cement follows and finally Bran is added. The addition of water should follow a ratio of 3-4 litres per 10kgs of cement. The paste formed can then be put into moulds that may be the size of 25x15x10 cm and the molded blocks are put in a well ventilated shade where they may be kept between 24-72 hrs. The mixing may be manual where production does not exceed 150 blocks a day.

Capital Investment Requirements in US$

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

Operating Costs in US$

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

General costs(Overheads)

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

Project Product Costs & Price Structure

Item	Qty/day	Qty/ yr	@	Pdn Cost/yr	UPx	Total Rve
Urea Molasses	50	15,600	2.76	45,644	4.5	70,200

Profitability Analysis Table

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

Marketing Analysis

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

Government Incentive

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

Agriculture Sector

MAKING CHILLI SAUCE

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

Production Capacity
The Rated Plant capacity is 500ltrs/day

Production Process
Chilli sauce is made following the steps outlined below:

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

Raw Materials/Ingredients
Hot Paper, Salt, Mustard oil, Vinegar, Chillies and Garlic

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

Capital Investment Requirements and Equipment
The project will be operated locally on small scale, i.e. producing at least 500ltrs of processed Chilli per day (15,000ltr/month). The total Fixed and Working Capital Investment required to start this project is estimated at USD 26,955.

Market Analysis:
Chilli may be sold locally in Super markets, Whole sale shops, Groceries and Hotels. It can also be exported.

Capital Investment in US$

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

Operating Costs in US$

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

General Costs (Over heads)

Rent	600	7,200
Labour	1,000	12,000
Utilities (Power &Water)	300	3,600
Repair & Maintenance	500	6,000
Gas	500	6,000
Fuel	500	6,000

Depreciation (Asset write off) Expenses	562	6,739
Sub - total	3,962	47,539
Total Operating Costs	36,410	436,915

Project Product Costs & Price Estimate in US$

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

Profitability Analysis:

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

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

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

Agriculture Sector

FRUIT SALAD PROCESSING AND VENDING

Introduction:

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

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

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

Production Capacity:

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

Technology and Process Description:

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

Capital Investment Requirements in US$

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

Direct Materials, Supplies and Costs in US$

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

General Costs(Overheads)

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

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

Project Product Costs and Price Structure

Item	Qty/ day	Qty/Yr	@	Pdn cost/Yr	UPx
Fruit Salads	250	78,000	0.6	46,800	0.8

Profitability Analysis in US$

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

Market Analysis

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

Agriculture Sector

REARING LOCAL HENS FOR EGGS

Introduction

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

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

Processes description

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

Scale of Investment

Capital Investment Requirements in US$

Capital Item	Units	Qty	@	Amount
Feeders	No	50	3	125
Drinkers	No	60	2	90
Brooder	No	2	80	160
Poultry house	No	3	200	600
Stands	No	4	5	20
Total				995

Production and Operating Costs in US$

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

General costs (Overheads)

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

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

Project Product Costs and Price Structure

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

Profitability Analysis Table in US$

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

Government facilities and incentives

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

Market analysis

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

Agriculture Sector

MAKING MAYONAISE CREAM

Introduction

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

Production process

A method of producing mayonnaise comprises directing coagulated egg yolk and milk protein into a container in which they are mixed together and adding salt and a small amount of oil and colorants. The mixture is then directed through a dosing pump to a first heater in which the mixture is briefly heated to a temperature in the range of about 80°C-100°C.

The emulsion is then stirred with vinegar and other additives to form a mayonnaise. The mayonnaise is pasteurized by heating it briefly in a second heater to about 80°C-100°C or it is sterilized by heating it to a higher temperature of 110°C- 130°C. Thereafter, the pasteurized mayonnaise is cooled in a second cooler and it is continuously filled into sterilized containers.

Capital Investment Requirements in US$

Capital investment item	Units	Qty	@	Amount
Dynamic mixer	No.	1	1,000	1,000
Heater	No.	2	100	200
Delivery Van	No.	1	6,500	6,500
Cooling machine	No.	2	750	1,500
Packing materials	No.	200	0.5	100
Total Costs on Equipments				9,300

Production and Operating costs in US $

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Oil	Litres	2	10	20	520	6,240
Vinegar	Litres	3	5	15	390	4,680
Milk Proteins	Kgs	10	18	180	4,680	56,160
Salt	Kgs	0.1	2	0.2	5.2	62.4
Eggs	Trays	3.2	35	112	2,912	34,944
Sub-total			70	327.2	8,507	102,086

General costs (overheads)

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

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

Project product Costs and Price Structure

Item	Qty /day	Qty/yr	@	Pdncost /yr	UPx	TR
Mayonnaise cream	200	62,400	2.3	114,551	2.5	156,000

Profitability Analysis

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

Market Analysis

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

Sources of raw materials:

Raw materials are locally available in shops and markets.

Agriculture Sector

MAKING MATS

Introduction

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

Production process

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

Capital Investment Requirements in US$

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

Production and Operating costs in US$

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

General costs

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

1 Production costs assumed 312 days per year with a daily capacity of 30 mats

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

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

Project product Costs and Price Structure

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

Profitability Analysis

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

Market Analysis

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

Sources of Raw materials:

Raw materials can be sourced locally.

Government Facilities and Incentives

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

Agriculture Sector

ESTABLISHING A BAKERY

Introduction

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

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

Capital Requirements and equipment

The investment scale depends on the project set objectives.

Capital Investment Requirements in US$

Capital Investment Item	Units	Qty	@	total
Land & Buildings	No			25,000
Firewood Oven	No	1	3,500	3,500
Mixer	No	1	2,700	2,700
Proover System	No	1	750	750
Doughnut Stove	No	1	50	50
Trays	No	100	10	1,000
Tins (1kg-size)	No	40	12	480
Tins (1/2kg-size)	No	40	10	400
Furniture &Fittings	No		2,000	2,000
Delivery Van	No	2	9,000	18,000
Slicing Machine	No	1	1,250	1,250
Other tools	No		450	450
Total				55,580

Production and Operating Costs

(a)Direct Materials, Supplies and Costs in $						
Cost Item	Units	@	Qty/ day	Pdn Cost/day	Pdn Cost/ month	Pdn Cost/ year
Direct Costs						
Wheat flour	kgs	2	1,000	2,000	52,000	624,000
Salt	kgs	1	20	20	520	6,240
Sugar	kgs	1	250	250	6,500	78,000
Yeast	kgs	6	20	120	3,120	37,440
Improver	kgs	4	20	20	520	6,240
Water	Ltrs	0.05	1,200	60	1,560	18,720
Vanilla	Btls	1	5	5	130	1,560
Cooking fat	ltrs	2	20	40	1,040	12,480
Packaging materials	Pcs	0.03	2,500	75	1,950	23,400
Other materials				4	104	1,248
Sub-total				2,594	67,444	809,328
General Costs (Overheads)						
Labour					1,200	14,400
Utilities					680	8,160
Selling & distribution					1,800	150
Administration expenses					267	3,200
Cleaning & toiletries					192	2,300
Miscellaneous					175	2,100
Depreciation					600	50
Sub-total					4,914	30,360
Total Operating Costs					72,358	839,688

1) Production costs assumed 312 days per year with daily capacity of producing 2,750 loaves of bread.
2) Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3) Direct costs include materials, supplies and other costs that directly go into production of the product.
4) Total monthly days assumed are 26-days.
5) The valuation currency used is United States Dollars.

Project Product Costs and Price Structure

Item	Qty/ day	Qty/yr	@	Pdn Cost/yr	UPx	Total Rve
Bread-1kg	1,250	390,000	1	300,688	1.4	546,000
Bread-1/2kg	1,500	468,000	0.5	539,000	0.8	374,400
Total	2,750	858,000		839,688		920,400

Profitability Analysis Table

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

Market Analysis

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

Government Facilities and Incentives

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

Agriculture Sector

JUICE EXTRACTION - APPLES

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

Production Capacity:
Based on the demand projection indicated in the introduction, capital requirement and minimum economy of scale, the proposed plant will have production capacity of 2,000 liters of apple juice per annum.

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

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

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

Market Analysis & Projected Demand
Apple juice may be sold in Super markets, Schools, Hospitals, Hotels, Retail shops and Exported.

Capital Requirements:

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

Operating Costs

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

General Costs (Over heads)						
Item	Units	@	Qty/ day	Prod. Cost/day$	Prod. Cost/ month$	Prod. Cost/ Year[1]$
Rent					500	6,000
Packaging Material					500	6,000
Labour					1500	18,000
Utilities (Power)					400	4,800
Repair & Servicing					300	3,600
Fuel					500	6,000
Depreciation (Asset write off) Expenses					300	3,600
Sub – total					4,000.00	48,000.00
Total Operating Costs					58,444	701,328

Project Product Costs & Price Structure

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

Profitability Analysis

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

Sources of Supply of Raw Materials:
The major raw material, apple fruit can be grown in the region, in areas like Kanungu & Kabaale or sourced from neighboring regions like Kenya.

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

Agriculture Sector

CHEESE MAKING

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

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

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

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

Market Analysis:
The demand for Cheese is widely spread across all factions of people in Uganda as one of the essential items of daily life in the diet of the population, thus an indispensable necessity both locally and internationally.

Capital Investment Requirements in US$

Capital Investment Item	Units	Qty	@	Amount
Milk Van	No.	1	8,000	8,000
Cream Separator	No.	1	1,600	1,600
Molding Machine	No.	1	2,000	2,000
Cheese Vat	No.	1	325	325
C.Scoops	No.	2	100	200
Freezers	No.	2	1,000	2,000
Boiler	No.	1	1,000	1,000
Centrifuge	No.	1	500	500
Cheese Knives	No.	2	10	20
Packaging Machine	No.	1	3,000	3,000
Milk Cans	No.	20	80	1,600
Weighing Balance	No.	1	80	80
Furniture	No.	5	30	150
Total Amount				20,475

Operating Costs in US$

	Units	@	Qty/ day	Prod. Cost/day	Prod. Cost/ month	Prod. Cost/ Year
Direct Costs						
Milk	Litres	1	1,000	1,000	26,000	312,000
Enzymes	Litres	2	100	200	5,200	62,400
Salt	Kgs	1	50	50	1,300	33,800
Phosphate	Kgs	2	50	100	2,600	67,600
Sub total				1,350	35,100	475,800
General Costs (Over heads)						
Rent					300	3,600
Packaging Material	150	1,800				
Labour	350	4,200				
Utilities (Power & Water)					400	4,800
Repair & Servicing					200	2,400
Fuel					200	2,400
Depreciation (Asset write off) Expenses					434	5,208
Sub - total					72,234	976,008
Total Operating Costs					107,334	1,451,808

Project Product Costs & Price Structure in $

Item	Qty/ day (Kg)	Qty/yr (Kg)	@	Pdn Cost/ yr	UPx	T/rev
Cheese	1,000	312,000	2	624,000	3	936,000

Profitability Analysis in US$

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

Sources of Supply of Raw Materials
Raw materials will be locally sourced from Dairy farmers especially from Western Uganda.

Agriculture Sector

BANANA FABRIC POLYMER

Introduction

A cost- effective substitute for glass fibre, banana fibre polymer composite can be a very good fibre-reinforced with plastic to make a variety of products. Products such as trays, mirror-casings, voltage stabilizer covers and electrical panels are now made from this material. The envisaged project is therefore to set up a plant for making banana fabric polymer. The project cost is US$4,325 with a capacity of 10,000kg per annum yielding an estimated revenue of US$ 62,000 per year with a payback period of 2 years and 1 month.

Production Process, capacity and technology

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

Capital Investment Requirement in US $

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

Direct materials, supplies and costs

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

General Costs (Overheads)

Labour	625	7,500
Selling & distribution	150	1,800
Utilities	250	3,000
Rent	350	4,200
Administration expenses	65	780
Miscellaneous expenses	150	1,800
Depreciation	163	1,959
Sub-total	1,753	21,039
Total Operating Costs	2,206.18	26,477

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

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

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

4. A production month is 26 work days

5. Currency used is US Dollars.

Project product costs and Price structure in US $

Item	Qty/ day	Qty/yr	Unit Cost	Pdn cost/yr	UPx	TR
Banana Fabric Polymer	32	10,000	5.70	56,972	6.20	62,000

Profitability Analysis in US$

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

Market

The cost effective nature of this product has made it a perfect substitute for glass fibre. Today, the demand for banana fabric polymer is gaining ground as a variety of products can be made from this, with a potential market growth. Therefore most of the manufacturing industries should be targeted so as to tap forward and backward linkages as the fibre is normally used in the manufacture of other products.

Source of Equipment

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

Government incentive:

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

Agriculture Sector

MAKING YOGHURT

Introduction
This profile envisages the establishment of a plant that produces Yoghurt generically known as cultured milk as they all derive from the action of bacteria on all or part of the Lactose to produce Lactic acid, carbon dioxide acetic acid, diacetyl, acetaldehyde and several other components that give the products the characteristic of fresh taste and smell.

Production Capacity
This plant will be established on the premise that at least 4,000 litres of yoghurt will be produced per day leading to 1,248,000 litres per year.

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

Raw Materials:
The major raw materials used to make yoghurt include: Milk, Milk powder, Stabilizers, Sugar, Flavour, color and lactic cultured.

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

Market Analysis & Projected Demand:
There is a ready market for Yoghurt among the Youths and Children who cherish the product.

Project Costs in US$

Capital Investment Requirements:

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

Operating Costs in US$

Item	Units	@	Qty/ day	Prod. Cost/ day	Prod. Cost/ month	Prod. Cost/ Year
Direct Costs						
Milk	Litres	1	500	500	13,000	156,000
Starter	Litres	2	5	10	260	3,120
Flavour	Kgs	1	5	5	130	1,560
Food Colour	Kgs	1	5	5	130	1,560
Sub total				14,040	365,040	4,380,480
Rent					250	3,000
Packaging					500	6,000
Labour					600	7,200
Utilities (Power &Water)					500	6,000
Repair & Maintenance					200	2,400
Fuel					250	3,000
Depreciation (Asset write off) Expenses					250	1,500
Sub - total					2,550	29,100
Total Operating Costs					367,590	4,409,580

Project Product Costs and Price Structure in US$

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

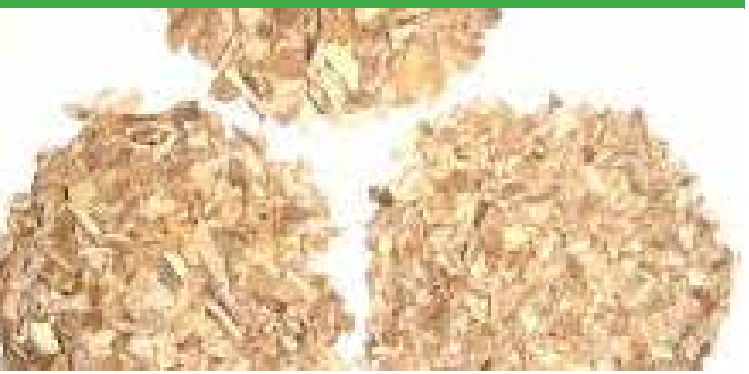
Profitability Analysis in US$

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

Sources of Supply of Raw materials
Milk, which is the prime raw material for Yoghurt making will be supplied locally from milk collecting centres especially in Western and Central parts of Uganda.

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

Agriculture Sector



MAKING FERTILIZERS FROM DRY BONES

Introduction

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

Production Capacity and Technology

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

Investment Scale, Capital Requirements & Equipment

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

Capital Investment Requirements

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

The machines are available on the local market.

Production and Operating Costs in US$

(a)Direct Materials, Supplies and Costs

Cost Item	Units	@	Qty/day	Pdn cost/day	Pdn cost/ mth	Pdn cost/ year
Direct Costs						
Dry bones	Kgs	0.3	450	135	3,510	42,120
Fire wood	Kgs	0.25	600	150	3900	46,800
Fuel	Ltrs	0.8	14	11.2	291.2	3,494
Match boxes	Pcs	0.05	1	0.05	1.3	15.6
Packaging materials	Pcs	0.7	8	5.6	145.6	1,747
Sub-total			1,073	301.85	3,608	94,177
General Costs (Overheads)						
Labor					500	6,000
Utilities					80	960
Rent					500	6,000
Cleaning & toiletries					121	1,450
Selling & distribution					104	1,250
Fuel					208	2,500
Miscellaneous expenses					71	850
Depreciation					360	4,315
Sub-total					1,944	23,325
Total Operating Costs					5,552	117,502

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

Market

Project Product Costs and Price Structure

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

Profitability Analysis Table

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

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

Government Facilities & Incentives

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

Agriculture Sector

SMOKING FISH

Introduction

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

Production Process

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

Capital Investment Requirements in US$

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

Production and Operation Costs

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

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

General costs (Overheads)

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

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

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

Product cost and Price Structure in US $

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

Profitability Analysis

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

Market

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

Availability of Raw Materials

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

Government Intervention

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

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

Agriculture Sector

MAKING CURRY POWDER

Introduction

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

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

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

Plant Capacity

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

Production Process

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

Sources of supply of Equipments

All equipments can be got in Uganda.

Scale of investment

Capital Investment Requirements

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

Production and Operation costs

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

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

Project Product costs and Price Structure in US$

Item	Qty /day	Qty/yr	@	Pdn/yr	UPx	Total revenue
Curry powder	100	31,200	6	191,964	7	218,400
Total				191,964		218,400

Profitability Analysis Table

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

Market Analysis

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

Government Incentives

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

Agriculture Sector

PROCESSING SUGAR

Introduction

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

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

Production Capacity, Technology &Process

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

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

Investment Scale, Capital Requirements & Equipment

Capital Investment Requirements in US$

Capital investment item	Units	Qty	@	Total
Land & Buildings	No	-	-	17,000
Delivery Van (3-tones)	No	1	12,700	12,700
Sugar cane crusher	No	1	880	750
Filtering machine	No	1	350	350
Collection containers	No	4	100	400
Boiler	No	2	800	1,500
Mixer	No	2	250	500
Dryer	No	1	2,000	2,000
Packaging Machine	No	2	200	400
Weighing machine	No	2	200	400
Furniture & Fixture	No	-	-	1,200
Other tools	No	-	-	900
Total				38,100

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						
Sugar Cane	Kgs	0.2	1,500	300	7,800	93,600
Lime	Kgs	0.25	8	2	52	624
Sulfur dioxide	Kgs	0.5	3	1.5	39	468
Packaging materials	Pcs	0.05	1,000	50	1,300	15,600
Sub-total			2,511	354	9,191	110,292

General Costs (Overheads)

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

1) Production costs assumed are for 312 days per year with daily capacity of processing 1,000kgs of sugar.
2) Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3) Direct costs include: materials, supplies and other costs that directly go into production of the product.
4) Total monthly days assumed are 26-work days.
5) The valuation currency used is United States Dollars.

Market Analysis

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

Project Product Costs and Price Structure

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

Profitability Analysis Table

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

Government Facilities & Incentives

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

Agriculture Sector

MAKING FISH PICKLES

Introduction

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

Production process

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

Capital Investment Requirements in US$

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

Production and Operating Costs

Direct Materials, Supplies and Costs in US$

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

General Costs(Over heads)

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

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

Project Product Cost and Price Structure in US$

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

Profitability Analysis in US$

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

Market Analysis

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

Supply of Raw materials and Equipment

Raw materials and Equipments can be procured locally.

Government Incentives Available

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

Agriculture Sector

DRYING FRUITS BY OSMO-AIR DEHYDRATION

Introduction

There is a wide variety of fruits in Uganda. The problem is that fruits like mangoes, pineapples, jackfruit, etc., are very perishable. To retain the freshness, colour, flavor and texture of fruits, the fruits are Osmo-air dried. Osmo-air dried fruits are widely used in ready-to-eat foods, ice creams, fruit salad, cakes and bakery. This activity can be set up in rural areas to benefit the rural people. The plant has a capacity of 31,200kgs per year allowing revenue estimates of US$31,200 net profit of 21% per year having invested US$ 4,331, which is estimated to be recovered with 1 year and 4 months.

Production Process, Capacity and Technology and capital requirements

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

Capital Investment Item	Units	Qty	@	Amount
Syrup tank	No	1	500	500
Heating vessels	No	1	800	800
Nylon net	No	1	500	500
Plastic vats	No	1	1,000	1,000
Cross flow drier	No	1	1,000	1,000
Impulse sealer	No	1	31	31
Other tools & equipment	No	1	500	500
TC of Machinery & Tools				4,331

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

Production and Operation costs in US$

(a) Direct materials, supplies and costs

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/yr
Direct Costs						
Fruits	Kgs	0.3	16.03	4.81	125.0	1,500
Sugar syrup	ltrs/ kgs	1.1	0.80	0.88	22.9	275
Citric acid	Ltrs	36	0.32	11	300.0	3,600
Packing material	Kgs	0.5	48.08	24	625.0	7,500
Sub-total				41	1,072.92	12,875

General Costs (Overheads)

Labour	400	4,800
Selling & distribution	120	1,440
Utilities (Water, power)	150	1,800
Administration	50	600
Rent	100	1,200
Miscellaneous expenses	100	1,200
Depreciation	69	825
Sub-total	989	11,865
Total Operating Costs	2,061.62	24,740

Project Product Costs and Price Structure in US $

Item	Qty/day	Qty/yr	Unit Cost	Pdn cost/r	UPx	TR
Dried Fruits	100	31,200	0.8	24,740	1	31,200

Profitability Analysis in US$

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

Market

Osmo-air dried fruits are similar to fresh fruits so they are easy to market. Supply to ice cream makers, bakeries, restaurants, fast food places, etc. Supply to the military for the fruits to be used as military rations is also necessary for the fruits to capture market.

Source of Equipment and Raw Materials

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

Government Incentives available

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

Agriculture Sector

DEHULLING OF SESAME SEEDS

Introduction

Sesame is commonly called simsim and it is predominantly grown in the North, West Nile, Teso, and Kapchorwa sub regions of Uganda. Sesame is used to produce oil used for cooking.

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

Production Process

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

Capital Investment Requirements in US$

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

Production and Operating Costs

(a)Direct Materials, Supplies and Costs

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

General Costs (Overheads)

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

1) Production costs assumed 312 days per year with daily capacity of producing 1,000kgms of sesame Seeds.

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

Market Analysis

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

Project Product Costs and Price Structure

Item	Qty/Day	Qty/yr	@	Pdn Cost/ yr	UPx	Total Rve
Sesame seeds	1,000	312,000	0.46	142,793	0.65	202,800

Profitability Analysis Table in US$

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

Government Incentive

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

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

Agriculture Sector

PRODUCING SIMSIM AND GROUND NUT PASTE

Introduction

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

Production Capacity, Technology and Process

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

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

Capital Investment Requirements in US$

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

Production and Operating Costs

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

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

General Costs (Overheads)

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

1. Production costs assumed 312 days per year with daily capacity of producing 300kgs of paste.
2. Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3. Direct costs include materials, supplies and other costs that directly go into production of the product.
4. Total monthly days assumed are 26-days.
5. The valuation currency used is United States Dollars.

Market Analysis

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

Project Product Costs and Price Structure

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

Profitability Analysis Table

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

Government Facilities and Incentives

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

Agriculture Sector

ESTABLISHING A SOYA FLOUR PROCESSING PLANT

Introduction

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

Production Capacity

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

Production Process

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

Plant & Machinery

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

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

Market Analysis:

The potential markets for soya flour are in the school feeding programme, Social welfare feeding programme, confectionery industries, Baking Industries for Nuggets and Chunks manufacturing as a supplement for wheat flour.

Project Costs in US$

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

Fixed Capital Requirements

Capital Investment: (Fixed) in US$

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

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

Running Costs (Monthly) in US$

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

Project Monthly Revenue:

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

Description	Monthly Sales	Price for 5kg pkt (USD)	Revenue
Out put	30,000kg	1.5	45,000
W. Capital			28,900
Gross Profit			16,100

Raw Material Availability

For the proposed product mix 1 ton per day is needed; this translates into 30 tons per month of Soya beans that is required. This will be locally sourced from local Markets.

Government Facilities and Incentives Available

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

Agriculture Sector

PROCESSING SOYA FLOUR

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

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

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

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

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

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

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

Project Costs

Capital Investment Requirements in US$

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

Operating Costs in US$

Item	Units	@	Qty/ day	Prod. Cost/day	Prod. Cost/ month	Prod. Cost/ Year
Direct Costs						
Soya	Kgs	0.5	1,000	500	13,000	156,000
Sub total	5			00	13,000	156,000

General Costs (Over heads)

Rent	500	6,000
Gas	500	6,000
Labour	500	6,000
Utilities (Power & Water)	800	9,600
Repair & Maintenance	500	6,000
Packers	130	1,560
Fuel	500	6,000
Depreciation(Asset write off) Expense	268.7	3,224
Sub - total	3,699	44,384
Total Operating Costs	16,699	200,384

3. Project Product Costs & Price Structure in US$

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

Profitability Analysis in US$

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

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

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

Market Analysis:
The potential markets for soya flour are in the school feeding programme, Social welfare feeding programme, confectionery industries, Baking Industries for Nuggets and Chunks manufacturing as a supplement for wheat flour.

Agriculture Sector

RICE HULLING PLANT

Introduction

This business idea is for hulling and selling of rice. It is premised on processing 7,200 Kg per day, which translates into 187,200 Kg per month. The revenue potential is estimated at US$ 198,800 per month translating into US$ 2,277,600 per year. The total investment is estimated cost at USD 10,865. The project is also estimated to yield a net profit margin of 50%.

Production Process

Dried and cleaned paddy is de-husked by aspiration, and the de-husked brown rice is got. The brown rice is placed in a polisher where the polished rice and bran are separated. After sieving the polished rice, the broken rice is separated and the sieved rice is then packed in bags for dispatch.

Capital investment requirements in US$

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

Production & Operating Cost in US Dollars

Direct Materials, Supplies and Costs

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

General costs (Overheads)

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

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

Project Product Cost and Price Structure

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

Profitability analysis in US$

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

Market

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

Equipment Suppliers

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

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

Agriculture Sector

GROWING WATER MELONS

Introduction

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

Production process

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

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

Machines & tools required in US$

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

Land requirements:

2acres of land approx. 1,000 US $

Production and operating cost for 3 months in US$

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

General costs (Overheads)

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

Product cost and Price structure

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

Profitability analysis in US $

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

Market Analysis

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

Equipment and raw materials suppliers

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

Government Incentives Available

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

Agriculture Sector

ESTABLISHING AN OIL SEED EXTRACTION PLANT

Introduction

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

Production Capacity, Technology & Process

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

Investment Scale and Capital Requirements Equipment

The investment scale varies according to the intended objectives of the entrepreneur and the production capacity of the equipments used.

Capital Investment Requirements in US$

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

Production and Operating Costs

(a)Direct materials, Supplies and Costs

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

General Costs (Overheads)

Rent	600	7,200
Labour	617	7,404
Utilities	833	9,996
Selling & distribution		0
Cleaning & Toiletries	104	1,248
Miscellaneous expenses	88	1,056
Depreciation	426	5,113
Sub-total	2,668	32,017
Total Operating Costs	7,120	85,439

1) Production costs are assumed for 312 days per year with daily capacity of processing 125 litres of seed cooking oil.
2) Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3) Direct costs include: materials, supplies and other costs that directly go into production of the product.
4) Total monthly workdays assumed are 26-days.
5) The valuation currency used is United States Dollar

Market Analysis

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

Project product costs and Price Structure

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

Profitability Analysis Table

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

Government Facilities and Incentives

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

Agriculture Sector

MAKING POULTRY FEEDS

Introduction

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

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

Capital Investment Requirements in US$

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

Production and Operating Costs in US$

Direct Materials, Supplies and Costs

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/yr
Direct Costs						
Cereals	Kgs	0.2	176	35	915	10,982
Oil seeds	Kgs	0.38	72	27	711	8,536
By-Products	Kgs	0.02	482	10	251	3,008
Di-Calcium Phosphate	Kg	0.15	32	5	125	1,498
Packaging Materials	Pcs	0.75	8	6	156	1,872
Other materials		-	-	-	95	1,140
Sub-total			770	83	2,253	27,036

General Costs (Overheads)

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

1) Production costs assumed are for 312 days per year with daily production of 625kgs and 128kgsof poultry feeds and maize flour respectively.
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	UnitCost	Pdn cost/yr	Upx	T/rev
Poultry Feeds	625	195,000	0.28	54,567	0.4	78,000
Maize Flour	128	39,936	0.28	11,182	0.45	17,971
Total	753	234,936		65,749		95,971

Profitability Analysis Table

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

Market Analysis

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

Government Facilities and Incentives

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

Risk certainty

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

Agriculture Sector

ESTABLISHING A CUPCAKE MANUFACTURING PLANT

Introduction

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

The estimated initial investment for setting up a medium cupcake enterprise is US$ 4,905. This idea is projected to yield annual revenue of US$ 268,320, with a net profit margin of 32%

Process

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

Basic Cupcake Mix;

50g/2oz self raising flour

50g/2oz Caster sugar (superfine)

50g/2oz Butter or margarine (shortening)

Tools & Equipments

The Essential tools and equipments required include:

Measuring Cups and spoons

Electric Mixer or Hand Mixer

Sheet Pans or Cupcake Pans

Oven Thermometer.

Capital Investment Requirements

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

Production and operating costs

Item	Units	@ $	Qty/day	Prod. Cost/day$	Prod. Cost/ month$	Prod. Cost/ Year
Direct Costs						
Flour	Kgs	1	500	415	10,790	129,480
Margarine	Kgs	4	5	20	520	6,240
Baking Powder	Kgs	2	2	3	78	936
Eggs	Trays	3	4	10	260	3,120
Sugar	Kgs	1	40	52	1,352	16,224
Sub total				500	13,000	156,000

General Costs (Over heads)

Rent	200	2,400
Packaging	260	3,120
Labour	300	3,600
Utilities (Power &Water)	200	2,400
Repair & Maintenance	500	6,000
Gas	500	6,000
Fuel	200	2,400
Depreciation(Asset write off) Expenses	102	1,224
Sub total	2,262	27,144
Total	15,262	183,144

Project product cost and Price structure

Item	Qty/day	Qty/yr	@$	Pdn Cost/ yr$	UPx	T/rev
Cup cakes	1000	312,000	0.59	183,144	0.86	268,320

Profitability Analysis Table

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

Government facilities

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

Agriculture Sector

SETTING UP A POULTRY PROCCESSING PLANT

Introduction

This project idea is based on the need to add value by processing chicken to reduce the rudimentary form that is dangerous for human consumption. Chicken is widely consumed in many households, hotels, schools and restaurants.

The venture requires capital investments of US$ 36,030, which is anticipated to yield annual revenue of US $993,720, with a payback period of 4 months.

Production Capacity, Technology and Process

The processes involve:
The birds are put in an automated head remover machine.
They are transferred to specialise a conveyer which sends them to automated picking machine that pluck the feathers off the birds.

They are then sent to the eviscerating equipment where the birds their insides are cleaned, packed and stored in a chilling machine ready for distribution.

Capital Investment Requirements

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

Production and Operating Costs

(a)Direct materials, Supplies and Costs

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

General Costs(Overheads)

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

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

Project product costs and Price Structure

Item	Qty/day	Qty/yr	Unit cost	Pdn/yr	Unit price	T/rev
Processed Chicken	325	101,400	9.4	949,160	9.8	993,720

Profitability Analysis Table

Profitability Item	Per Day	Per Month	Per Year
Revenue	3,185	82,810	993,720
Less: Production & Operating Costs	3,042	79,097	949,160
Profit	143	3,713	44,560

Government Facilities and Incentives

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

Agriculture Sector

MAKING FRUIT CHEESE

Introduction:

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

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

Production process

Fruit cheese can be made from any ripe fruit such as: mango, guava, jackfruit and bananas.
The fruit is peeled, cored and pulped.
Sugar along with butter, salt, colour is added and cooked into a thick mass
It is then poured on greased trays and spread.
The mixture is cooled and cut into suitable sizes, wrapped in polythene films and released to the market.

Capital investment Requirement in US $

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

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

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

General Costs (Overheads)

Labour	350	4,200
Selling & distribution	100	1,200
Utilities (Water, power)	75	900
Rent	50	600
Miscellaneous expenses	25	300
Depreciation	69	828
Sub-total	669	8,028
Total Operating Costs	1943	23,320

1. Production costs assume 312 days per year with daily capacity of 100 Kgs.

Project product cost and Price Structure

Item	Qty/ day	Qty/yr ($)	Unit cost	Pdn cost/yr	Unit price	Total rev($)
Fruit Cheese	100	31,200	0.7	23,320	1.61	49,920

Profitability Analysis in US $

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

Source of Equipment and Materials:

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

Agriculture Sector

ESTABLISHING AN ICE CREAM -BALLS MANUFACTURING PLANT

Introduction

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

Suggested Plant Capacity and Project Cost

The indicative project cost for manufacturing unit of Ice cream balls; with suggested capacity of 2,000 balls per day is US $ 25,250.

Technology and Process Description

Ice Cream ball is manufactured using cryogenic techniques. Cryogenics process uses liquid Nitrogen to instantaneously freeze Ice Cream balls, to a temperature of - 187 °C (-304° F.).

Special storage freezers are required to guarantee the highest flavor quality.

Plant and Machinery Required

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

Capital Investment Requirement in US$

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

Operating Cost in US $

Item	Units	@	Qty/ day	Prod. Cost/ day	Prod. Cost/ month	Prod. Cost/ Year
Direct Costs						
Milk	Litres	0.39	1000	390	10,140	121,680
Food Color	Kgs	0.58	50	29	754	9,048
Stabilizers	Kgs	1.9	10	19	494	5,928
Sugar	Kgs	1.3	200	260	6760	81,120
Sub total				698	18,148	217,776

General Costs (Over heads)

Rent	300	3,600
Packaging Material	500	6,000
Labour	600	7,200
Utilities (Power & Water)	500	6,000
Repair & Servicing	500	6,000
Fuel	500	6,000
Depreciation (Asset write off) Expenses	526	6,312
Sub - total	3,426	41,112
Total Operating Costs	21,574	258,888

Project Product Costs & Price Structure in US$

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

Profitability Analysis in US$

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

Sources of Supply of Raw Materials

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

Government Facilities Available

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

Agriculture Sector

TURKEY PACKING

Introduction

There is high demand for turkeys during festive seasons from customers such as Supermarkets, Canteens, Universities, Schools, and Hotels that seek for reliable and consistent suppliers..

The business idea for packing turkeys is a very promising venture with a capital investment cost of US$14,500 and yielding estimated revenue amounting to US$ 116,813 annually, with a net profit margin of 42% and a payback period of 1 year and 3 months.

Process, Capacity and Technology

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

Capital Investment Requirement in US $

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

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

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

General Costs (Overheads)

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

1. Production costs assumed 312 days per year with daily capacity of 48 Boxes
2. Depreciation (fixed asset write off) assumes 4 year life of assets written off at 25% per year for all assets.
3. Direct costs include materials, supplies and all other costs that directly go into production of a product.
4. A production month is assumed to have 26 days.
5. Currency used is US Dollars.

Project product cost and Price structure

Item	Qty/ day	Qty/yr	Unit cost	Pdn cost/yr	UPx	TR
Packed turkey pieces	48	14,976	4.51	67,599	7.8	116,813

Profitability Analysis in US$

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

Source of Equipment

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

Government Incentives available:

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

Agriculture Sector

PRODUCTION OF FRUIT SQUASH

Introduction

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

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

Production Capacity, Technology & Process

The production process is very simple as it involves squeezing, filtering, boiling and preservation.

Good quality ripe fruits are washed, peeled and cleaned. Then the juice is extracted from fruits and is filtered to remove seeds and fibres. Then the juice is processed and sterilized and then syrup of sugar preservatives are added and this mixture is stirred till a uniform solution is formed. After, the bottling and packing is done

Capital Investment Requirements

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

Government Facilities & Incentives

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

Production and Operating Costs

(a)Direct materials, Supplies and Costs

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdnc ost/yr
Direct Costs						
Fruits	Kgs	0.3	3,200	864	22,464	269,568
Sugar	Kgs	1.2	200	240	6,240	74,880
Preservatives	Kgs	2.5	10	25	650	7,800
Packing materials	Pcs	0.07	1,500	105	2,730	32,760
Sub-total			4,910	1,234	32,084	385,008

General Costs(Overheads)

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

Project Product Costs and Price Structure

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

Profitability Analysis Table

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

Agriculture Sector

PRODUCTION OF CITRUS PEEL CANDY

Introduction

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

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

Production Capacity, Technology & Process

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

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

Capital Investment Requirements in US$

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

Production and Operating Costs

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

General Costs(Overheads)

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

1. Production costs assumed are for 312 days per year with daily capacity of production of 3,000-250gms of peel candy.
2. Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3. Direct costs include: materials, supplies and other costs that directly go into production of the product.
4. Total monthly days assumed are 26-days.
5. The valuation currency used is United States Dollars.

Project Product Costs and Price

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

Profitability Analysis Table

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

Government Facilities and Incentives

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

Agriculture Sector

ACTIVATED CARBON FROM COCONUT SHELL

Introduction

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

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

Production Process

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

Capital Investment Requirements in US$

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

Production and Operating Costs

Direct Materials, Supplies and costs USD

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ month	Pdn cost/ year
Direct costs						
Coconut shells	Kgs	0.3	385	116	3,003	36,036
Zinc chloride	Litrs	1.27	50	64	1,651	19,812
Hydrochloric acid	Liters	3.5	30	105	2,730	32,760
Sub-total			465	284	7,384	88,608
Rent					150	1,800
Labour					2,000	24,000
Utilities (power)					150	1,800
Other costs					500	6,000
Depreciation (Asset write off) Exp					1846	5,948
Sub-total					4,646	39,548
Total Operating costs					12,030	128,156

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

Project Product costs and Price Structure in US$

Item	Qty/ day	Qty/Yr	@	Pdn/ Yr	UPx	T/rev
Activated Carbon	385	120,120	1.1	128,156	1.5	180,180

Profitability Analysis in US$

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

Government Facilities and Incentives

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

Agriculture Sector

MAKING TOMATO SAUCE & PASTE

Introduction

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

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

Technology and Process Description:

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

The manufacture of tomato sauce involves concentration of the juice, addition of juice extracts, salt and then boiling to attain 30oc-35oc degrees of concentration. After adding vinegar, which acts as a preservative, the tomato source is bottled for sale.

Capital Investment Requirements

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

Production and Operating Costs

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

General Costs(Overheads)

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

Production costs assumed are for 312 days per year with a daily capacity of 1,154 small bottles of tomato sauce; with this business idea, so many different tomato products in different sizes can be produced.

Depreciation (fixed asset write off) assumes 4 years life of assets written off at _25% per year for all assets.
Direct Costs include: materials, supplies and other costs that directly go into production of the product.
A production month is assumed to have 26 days.

Project Cost and Price Structure in US$

Item	Qty/day	Qty/Yr	@	Pdn cost/Yr	UPx	T/rev
Tomato sauce	1,154	360,048	0.3	124,434	0.9	342,048

Profitability Analysis in US$

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

Government Facilities and Incentives

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

Agriculture Sector

MAKING ADHESIVE PLYWOOD

Introduction

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

Production process

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

Capital Investment Requirements (US$)

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

Production and Operating costs (US$)

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

General costs(overheads)

Utilities(water and power)	150	1,800
Labour	750	9,000
Rent	250	3,000
Miscellaneous costs	1,000	12,000
Distribution costs	520	6,240
Depreciation(Asset write off)Expenses)	1010	12,123
Sub -total	3,680	44,163
Total Operating Costs	160,746	1,973,118

Project product costs and Price structures

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

Profitability Analysis (US$)

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

Raw materials

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

Agriculture Sector

BANANA FIBER PRODUCTS

Introduction

The banana fiber is a widely used product in making coarse woven fabrics e.g. sacks, ropes, twigs, sand bags, tents, webbings, canvas and screens, kit bags, tool bags, luggage, gunny bags and covers. The fiber is extracted from the pseudo-stem of banana. Banana fiber can also be blended with wool and cotton for making blankets, carpets etc. The proposed project is for setting up a banana fiber making plant to utilize the products of the variety of banana plantations in Uganda. The project cost is US$ 4,325 with capacity of 46,800kgs per year, revenue estimates stand at US$ 93,600 annually and a net profit margin of 72%.Production Process

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

Capital Investment Requirement in US $:

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

Production and Operating costs in US $

(a)Direct material, supplies and costs

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

General Costs (Overheads)

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

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

Project product costs and Price structure inUS $

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

Profitability Analysis in US$

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

Market

A wide range of products can be produced which enjoy good market in both rural and urban areas. It's a potential boost to the tourism sector and economy as a whole since many tourists like these products.

Sources of machinery and Equipment

While the equipment can be sourced from China and India, they can be fabricated in Uganda by Tree Shade Ltd, Mwanga II Rd-Kisenyi Kampala, and John Lugendo &Co Ltd, Ndeeba Masaka Rd, email lugendojohn07@yahoo.com.

Government incentive

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

Agriculture Sector

MAKING DRIED OYSTER MUSHROOMS

Introduction

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

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

Production process

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

Capital Investment Requirements in US$

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

Production and Operating Costs

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

General costs (overheads)

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

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

Item	Qty/day	Qty/yr	@	Pdn cost /yr	UPx	TR
Dried mushrooms	120	37,440	2.6	97,286	2.8	104,832

Profitably Analysis

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

Sources of raw materials and equipments

Raw materials and equipments are locally available

Government facilities and incentives

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

Agriculture Sector

TOMATOE GREEN HOUSE

Introduction

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

Project Description

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

Scale of Investment

Capital Investment Requirements in US$

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

Production and Operating Costs

Cost Item	Units	@	Qty/qtr	Pdn cost/ qtr	Pdn cost/ yr
Direct Costs					
Seedlings	Pkts	2	1000	2000	8000
Fertilisers	Sacks	5	20	100	400
Pesticides	Bottles	14	70	980	3,920
Sub-total				3,080	12,320

General Costs(Overheads)

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

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

Project Product Costs and Price Structures

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

Profitability Analysis in US$

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

Market Analysis

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

Sources of supply of raw materials

All the raw materials required are locally available in Uganda.

Government facilities & incentives available

The government has fixed tax waivers on agriculturalists.

Risk:

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

Agriculture Sector

DEHYDRATED FRUITS AND VEGETABLES

Introduction

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

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

Production Process, Capacity and Technology

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

The dehydrated fruits and vegetables are finally packed in suitable containers to avoid moisture absorption. Dehydration of fruits & vegetables is done by various processes like Traditional Sun Drying, Solar Dryers, Mechanical Dryers, vacuum freeze drying, vacuum drying, Osmotic dehydration, dehydration through explosion puffing and microwave based technique.

The envisaged project has minimum daily capacity of 100kg per day.

Capital Investment Requirement in US $:

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

Production and Operation costs in US$

(a) Direct materials, supplies and costs

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

General Costs (Overheads)

Labour	400
Selling & distribution	120
Utilities (Water, power)	150
Administration	50
Rent	100
Miscellaneous expenses	100
Depreciation	69
Sub-total	989
Total Operating Costs	2,061.62

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

Project product costs and Price structure in US$

Item	Qty/day	Qty/yr	Unit cost	Pdn cost/yr	UPx
Dehydrated fruits	100	31,200	0.8	24,740	1.3

Profitability Analysis in US$

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

Market

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

Source of Equipment and Materials

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

Government incentive

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

Agriculture Sector

MAKING ACTIVATED CARBON FROM RICE HUSKS

Introduction

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

Production Process

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

Capital Investment Requirements in US$

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

Production and Operating Costs in US$

Cost Item	Units	@	Qty/day	Pdn cost	Pdn cost/ month
Direct costs					
Rice husks	kgs	0.17	385	66.605	1,732
Zinc chloride	Ltrs	1.31	50	65.5	1,703
Hydrochloric acid	Ltrs	2.3	30	69	1,794
Sub-total			465	201.105	5,229

General costs (Overheads

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

1 Production costs assumed 312 days per year with a daily capacity of 500grams of activated carbon.

3Depreciation (fixed assets write off) assumes 4 years life of assets written off at 25% per year for all assets
3 Direct costs include materials, supplies and other costs that directly go into production of the product.

Project Product costs and Price Structure in US$

Item	Qty /day	Qty/ Yr	@	Pdn/ Yr	UPx
Activated carbon	500	156,000	0.65	102,123	1.3

Profitability Analysis in US$

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

Raw Materials and Equipments

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

Government Incentives Available

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

Agriculture Sector

CATTLE RAISING

Introduction

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

Production Capacity, Technology and Processing Description

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

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

Capital Investment requirements in US$

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

Direct Materials, Supplies and Costs in US$

Cost item	Units	@	Qty/ day	Cost/ day	Cost/ month	Cost/ 2year
Direct Costs						
Animals	no	200	100	0	-	20,000
Feeds (Additional feed)	Kg	0.5	500	250	6,500	91,000
Drugs		1.8	5	9	234	2,808
Pesticides	ltrs	2.5	5	1	90	2,160
Subtotal		201	600	250	6,500	115,968

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

Project Product Costs and Price Structure in US $

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

Profitability Analysis

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

Government Facilitates and Incentives Available

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

Agriculture Sector

BUTTER MAKING

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

Production Capacity
This plant will be capable of producing 400 kgs of Butter every day which will tantamount to 10400 kgs per month.

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

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

Capital Investment Requirements in US$

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

Operating cost in us $

Item	Units	@	Qty/ day	Prod. Cost/ day	Prod. Cost/ month	Prod. Cost/ Year
Direct Costs						
Milk	Ltrs	0.24	5,000	1,200	31,200	374,400
Salt	Kgs	0.4	20	8	208	2,496
Sub total				1,208	31,408	376,896

General Costs (Over heads)

Rent	600	7,200
Packaging	200	2,400
Labour	1,000	12,000
Utilities (Power &Water)	1,000	12,000
Repair & Maintenance	500	6,000
Fuel	1,500	18,000
Depreciation (Asset write off) Expenses	645.3	7,750
Sub - total	5,445	65,350
Total Operating Costs	36,853	42,246

Project product cost and Price structure

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

Profitability analysis

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

Sources of Supply of Raw Materials
Milk which is the prime Raw material for Butter making will be supplied locally from milk collecting centres especially in western and central parts of Uganda.

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

Agriculture Sector

MAKING BIO FERTILIZERS

Introduction

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

Production capacity

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

Scale of Investment, Capital Investment

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

Market Analysis:

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

Capital investment requirement in US $

Capital Investment Item	Qty	@$	Amount $
Delivery Van	1	6,000	6,000
Boiler	1	1,200	1,200
Auto Claves	1	3,000	3,000
Rotary Shakers	2	150	300
Fermenters	2	68	132
Hot air Oven	1	1000	1000
Air Conditioner	1	900	900
Water Distiller	1	1,000	1,000
Microscope	1	1200	1200
Balances	2	143	143
Lab Equipment	1	300	300
Refrigerator	1	743	743
Laminar air flow	1	430	430
Furniture	2	45	90
BOD Incubator	1	134	134
Sealing Machine	1	1,250	1,250
Total Amount			17,822

Production and operation costs in US $

Item	Units	@ $	Qty/ day	Prod. Cost/ day$	Prod. Cost/ month$	Prod. Cost/ Year
Direct Costs						
Lignite	Kgs	5.2	800	4,160	108,160	1,297,920
Sucrose	Kgs	4.2	100	420	10,920	131,040
Chemical nutrients	Kgs	3.5	100	350	9,100	109,200
Sub total				3,100	80,600	967,200

General Costs (Over heads)

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

Project Product Costs & Price Structure

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

Profitability Analysis

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

Sources of Supply of Raw Materials:

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

Government Facilities and Incentives Available:

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

Agriculture Sector

PROCESING COCOANUTS (DESICCATED COCONUTS)

Introduction

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

Production Process

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

Capital Investment Requirements in US$

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

Production and Operating costs in US$

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

General costs(overheads)

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

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

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

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

Project product Costs and Price Structure

Item	Qty/ day (kg)	Qty/ yr	@	Pdn cost /yr	UPx	TR
Desiccated Coconuts	300	93,600	1.6	145,666	1.9	182,520

Profitability Analysis in US$

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

Market Analysis

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

Sources of raw materials:

Raw materials are locally available.

Government Facilities and Incentives Available

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

Agriculture Sector

MAKING FRUIT BARS

Introduction

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

Production process

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

Capital Investment Requirements in US$

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

Production and Operating costs in US $

Cost Item	Units	@	Qty day	Pdn cost /day	Pdn cost/ month	Pdn cost/ year
Mangoes	Sack	35	1	35	910	10,920
Guava	Sack	35	1	35	910	10,920
Sugar	Kgs	50	20	1000	26000	312,000
Citric acid	ltrs	3	8	24	624	7,488
Sub-total					28,444	341,328

General costs(overheads)

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

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

Project product Costs and Price Structure in US$

Item	Qty / day	Qty /yr	@	Pdncost /yr	UPx	TR
Fruit bars	500	156,000	2.3	359,828	3.2	499,200

Profitability Analysis in US$

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

Market Analysis

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

Sources of raw materials:

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

Government Facilities and Incentives

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

Agriculture Sector

GREEN TEA POWDER-MATCHAI

Introduction

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

Production Capacity, Technology & Process

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

Capital Investment Requirements in US$

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

Production and Operation costs in US$

(a) Direct materials, supplies and costs

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

General Costs(Overheads)

Labour	792	9,500
Utilities	125	1,500
Selling & distribution	292	3,500
Cleaning & toiletries	115	1,380
Rent	500	6,000
Miscellaneous expenses	79	950
Depreciation	434	5,204
Sub-total	2,336	28,034
Total Operating Costs	12,697	153,216

1) Production costs assumed are for 312 days per year with daily capacity of producing 1,680-250gms of green tea powder.
2) Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3) Direct costs include: materials, supplies and other costs that directly go into production of the product.
4) Total monthly days assumed are 26-days.
5) The valuation currency used is United States Dollars

Project Product Costs and Price Structure

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

Profitability Analysis Table

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

Market Analysis

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

Government Facilities & Incentives

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

Agriculture Sector

AQUACULTURE

Introduction

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

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

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

Requirements

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

Capital Investment Requirements in US$

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

Production and Operating Costs in US$

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

General Costs(Overheads)

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

1) Production costs assumed 312 days per year with daily capacity of fish farming 60,000fish.
2) Depreciation (fixed asset write off) assumes 4-years life of assets written off at 25% per year for all assets.
3) Direct costs include: materials, supplies and other costs that directly go into production of the product.
4) Total monthly days assumed are 26-days.
5) The valuation currency used is United States Dollars

Market Analysis

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

Project Product Costs and Price Structure

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

Profitability Analysis Table

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

Government Participation

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

Agriculture Sector

CULTIVATION AND MARKETING OF FLOWERS

Introduction:

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

Production process

Flowers can be grown in any soil but most soils will be improved by treatment of some sort before planting. Flowers are heavy feeders and thrive best in well worked and well-drained soils. The beds should be prepared 6-12 months prior to planting. If prepared suitably, beds can last along time. Flowers are propagated by seeds, stem or root cuttings, layering, budding and grafting. Propagation by stem cuttings is the most common used method. The seeds are planted in a nursery at intervals of 2.5-5 cm.

The nursery beds are sparingly watered thrice a week and kept clean of weeds. The growing stems are then transferred to the real field in wooden structures.

Capita investment requirement

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

Production and operating costs

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

General costs (overheads)

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

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

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

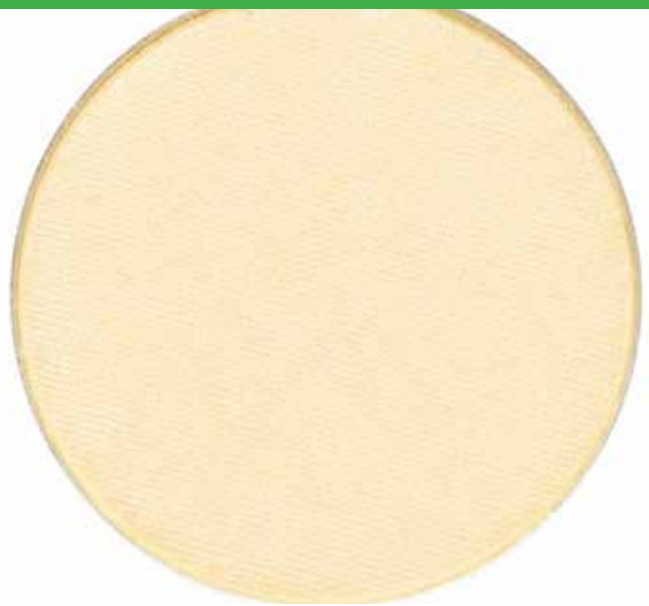
Project product cost and Price structure

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

Profitability analysis

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

Agriculture Sector



MANUFACTURING SCENTED PHENYL

Introduction

This business idea is for manufacturing and marketing of Scented phenyl. Scented phenyl is used as a disinfectant to clean wash basins, toilets, and kitchen sinks etc. It is used in residential houses and commercial establishments such as: hospitals, offices and shops etc., as a disinfectant and also for some pleasant smell. It is used in most households and other institution like hotels and thus has a good market potential. The business idea is premised on production of 2,600 liters of scented phenyl per month which translates into 31,200 liters per annum. The revenue potential is estimated at US$5,096 per month translating into US$61,152 per annum with a sales margin of 58% and total investment requirement is US$3,190 for the first year of project operation

Production Capacity

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

Production Process

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

Capital Investment Requirements in US$

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

Production and Operating Costs in US$

Cost Item	Units	@	Qty/ day	Pdn cost/ day	Pdn cost/ mth	Pdn cost/ yr
Direct Costs						
Rosin	liter	0.81	30	24.3	631.8	7,582
Caster oil	liter	0.85	15	12.75	331.5	3,978
Caustic soda	liter	0.8	15	12	312	3,744
Light creosote oil	liter	0.6	50	30	780	9,360
Sub-total			110	79.05	2,055	24,664

General Costs (Overheads)

Rent	250	3,000
Labour	500	6,000
Utilities	100	1,200
Transport	100	1,200
Preliminary Costs	100	1,200
Miscellaneous Costs	50	600
Depreciation	66	798
Sub-total	1,166	13,998
Total Operating Costs	3,222	38,662

1. Production costs assumed 312 days per year with a daily capacity of 100 liters of Scented Phenyl
2. Depreciation (fixed asset write off) assumes _4_ years life of assets written off at _25% per year for all assets.
3. Direct Costs include: materials, supplies and other costs that directly go into production of the product.
4. A production month is assumed to have 26 days.

Project Product Costs and Price Structures

Item	Qty/ day	Qty/ Yr	@	Pdn cost/Yr	UPx	T/rev
Scented Phenyl	100	31,200	1.24	38,662	1.96	61,152

Profitability Analysis in US$

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

Market Analysis

Market for scented phenyl is growing due to good fragrance and also because of almost the same cost as that of ordinary phenyl. The wide application in commercial establishments, hospitals, hotels, nursing homes and restaurants, etc., has carved a good market niche for this product.

Supply of Raw Materials and Equipments

Raw materials and machines can be imported from India.

Agriculture Sector

MAKING NATURAL FIBRE YARN(ROPES)

Introduction

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

Production Process

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

Capital investment requirement in US$

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

Production and operating costs

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

General costs(overheads)

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

1. Production costs assumed 312 days per year with adaily capacity of 800 ropes
2. Depreciation (fixed asset write off) assumes a 4 year life of assests written off at 25% per year for all assets
3. Direct cost include materials ,supplies and other costs that directly go into production

Project product cost and Price structure

Item	Qty/ day	Qty/yr	@	Pdn cost /yr	UPx	TR
Ropes	800	249,600	0.73	182,208	0.8	145766

Profitability analysis

Profitability Item	Per day	Per month	Per Year
Revenue	467.2	12,147	145,766
Less production and operating Costs	728.75	18,948	227,370
Profit	19	484	5,808

Market analysis

Ropes are highly demanded in various sectors of the economy especially agricultural sector both urban and rural areas.

Government Facilities and Incentives Available

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

Source of information on machines

Machines can be purchased from Saachi Uganda Ltd Luwum Street.

Agriculture Sector

MAKING BAMBOO PRODUCTS

Introduction

This business idea is for making of bamboo products. Bamboo products are made out of natural resources available in rural areas. The application of bamboo is widely found in making variety of baskets, partitions, candy sticks, trays used in sericulture, etc. The business idea aims at production of 520 units per month which translates into 6240 units annually. The revenue potential is estimated at $54,600 per annually with a total capital investment of $1,465. The project has an estimated net profit of 14,594 and a payback period 2 years and 7 months.

Plant capacity

The idea envisages production of 6,240 units annually.

Production Process

The equipments used are knives and fixtures. Hand tools are also used. The manufacturing process starts with splitting bamboo into thin wafers to suit the variegated needs of the end product. This is followed by manually knitting the split wafers into products especially designed to cater for the needs of the customers.

Market Analysis

The bamboo products have a ready market both in rural and urban areas. A variety of bamboo products are used for storage of fruits, vegetables and grains etc. There is potential market at: traditional sites, tourist centers, public and private offices, hotels, etc. which would help in promoting this industry.

Scale of Investment

Capital Investment Requirements in US $

Item	Units	Qty	@	Amount
Knives and fixtures	No	25	22	550
Hand tools	No	30	16.5	495
Working Tables	No	3	140	420
Total				1,465

Production and Operating Expenses in US$

Cost Item	Units	@/ day	Qty/ day	Pdn Cost/ day	Pdn Cost/ month	Pdn Cost/ Year1
Direct costs3:						
Bamboo Sticks	No	0.18	400	72	1,872	22,464
Sub-total					1,872	22,464

General costs (Overheads)

Salaries and Wages	280	3,360
Electricity	120	1,440
Water	250	3,000
Transportation Expenses	200	2,400
Consumable stores	85	1020
Selling and Distribution	90	1080
Administrative expenses	150	1,800
Repairs	55	660
Shelter	210	2,520
Depreciation (Asset write off) Expenses	22	261.6
Sub-total	1,462	17,542
Total Operating Costs	3,334	40,006

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

Project Product Costs and Price Structure in$

Item	Qty / day	Qty/ yr	@	Pdn Cost / yr	UPx	TR
Small Baskets	12	3,744	6	19,223	6.5	24,336
Medium Baskets	7	2,184	6	9,612	7	15,288
Large baskets	6	1,872	6	9,612	8	14,976
Total	25	7,800	18	40,006	21.5	54,600

Profitability Analysis Table

Profitability Item	Per day	Per Month	Per Year
Revenue	175	4,550	54,600
Less: Production and Operating Costs	128	3,334	40,006
Profit	47	436	14,594

Agriculture Sector

MAKING SISAL FIBRE HANDICRAFTS

Introduction

This business idea is for production of sisal fibre handicrafts. Sisal fibre extracted from sisal leaves is used for making many types of decorative items, bags, wall hangings and toys. The products from sisal are normally appealing in tourist places, hotels and restaurants with a business risk is competition from other manufacturer thus need for proper management and control of the business. The business idea aims at production of 1,300 pieces of fibre handicrafts. The revenue potential is estimated at US$ 524,160 per year with a net profit margin 7%. The total capital investment for the project is US$ 1,260.

Plant Capacity

The profiled plant has a minimum capacity of 50 units per day.

Technology and Production Process

Sisal leaves are cut and fibre extracted through a Raspador machine. After washing in water and subsequent drying, the leaves are 'beaten' to remove undesired particles. The dry fibre is used for making braids, which are dyed and made into attractive handicrafts

Scale of investment

Capital Investment Requirements

Capital Investment Item	Units	Qty	@	Amount
Raspador Machine	No	1	750	750
Hand tools	No		510	510
Total				1,260

Production and Operation costs

Cost Item	Units	@/ day	Qty/ day	Pdn Cost/ day	Pdn Cost/ month	Pdn Cost/ Year
Direct costs3:						
Crude Petroleum Jelly	Kgs	8	129	1032	26,832	321,984
Oils	Litres	3.5	7	24.5	637	7,644
Scented ingredients	Kgs	8	1	8	208	2,496
Wax	Kgs	2.5	2	5	130	1,560
Packaging materials	Pieces	0.05	721	36.05	937	11,248
Sub-total					28,744	344,932

General costs (Overheads)

Labour	700	8,400
Other materials	1000	12,000
Utilities	1500	18,000
Administrative expenses	1500	18,000
Selling and Distribution	3250	39,000
Fuel	3000	36,000
Miscellaneous expenses	700	8,400
Depreciation (Asset write off) Expenses	26.25	315
Sub-total	11676.25	140,115
Total Operating Costs	40,421	485,047

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

Project Product costs and Price Structure in US $

Item	Qty /day	Qty/ yr	@	Pdn/ yr	UPx	T/rev
Bags	70	21,840	22	485,047	24	524,160

Profitability Analysis in US $

Profitability Item	Per day	Per Month	Per Year
Revenue	1680	43,680	524,160
Less: Production and Operating Costs	1555	40,421	485,047
Profit	125	3,259	39,113

Sources of supply of raw materials and equipments

All equipments and raw materials can be got in Uganda.

Market Analysis

As the handicrafts made of sisal fibre are elegant and cost effective, the market for sisal fibre is promising and attractive especially in urban and semi-urban areas. The sisal handicrafts also enjoy export potential.

Agriculture Sector

MAKING DECORTICATED CASHEWNUT

Introduction

This business idea is for Production and marketing of edible cashew nuts, the business idea is premised on production of 6,680 kgs of cashew nuts per month which translates into 56160 per year. The revenue potential is estimated at US$ 5408 per month, translating into 64896 per year. The project cost is US $ 64,896

Production Process

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

Production Capacity

The plant can have a capacity 9000 kgs per year

Land Requirement

Rent for a year would cost about 1,200 US Dollars

Capital investment requirement in US $

Item	Unit	Quantity	@	Total
Cashew Decorticator	No.	1	1,000	1,000
Other equipments	No.	1	100	100
Delivery van	No.	1	2,500	2,500
TC of Machinery				3,600

Production and operating costs in US $

Cost Item	Units	@	Qty/ day	Prod. cost/ day	Prod. Cost/ month	Prod. Cost/ year
Cashew nuts	Kgs	0.6	300	180	4,680	56,160
Sub-total					6,680	56,160

General costs (Overheads)

Utilities (power)	15	180
Utilities (water)	15	180
Salaries	60	720
Rent	75	900
Depreciation (Assets write off) Expenses	75	900
Sub-total	240	2,880
Total Operating Costs	6,920	59,040

Project cost

Item	Qty/ day	Qty/ yr	@	Prod. Cost /year	UPx	TR
cashew nuts	320	99,840	0.5	49,920	1.3	64,896

Profitability analysis in US$

Profitability item	per day	per month	per year
Revenue			
Cashew nuts	208	5,408	64,896
Less Prod & Operating Costs	189.2	4,920	59,040
Profit	18.8	488	5,856

Market

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

Government Incentives

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

Equipment Suppliers

Equipment can be imported from Asia and Europe

Agriculture Sector

ESSENCE EXTRACTION FROM CURRY LEAVES

Introduction

This business idea is for essence extraction from curry leaves. Essence adds flavor and taste to food. For one to enter the market, it is recommended that s/he targets supplying to supermarket chains, grocery/retail shops and restaurants. The business idea aims at production of 46,800 bottles of essence annually. The revenue potential is estimated at US $ 702,000 annually. The total capital investment for the project is US $ 4,700.

Plant Capacity

The profiled plant has a minimum capacity of 150 vials per day and this is an output of a single 8-hour work shift.

Technology and Production process

Essence is extracted from the curry leaves with the essence extractor or distillation set then the liquid is filled in bottles and sealed. The room should be moist to conserve the fresh curry leaves.

Scale of investment

Capital Investment Requirements in US$

Capital Item	Units	Qty	@	Amount
Distillation Set	No	1	1000	1,000
Working bench	No	10	370	3,700
Total				4,700

Production and Operating Costs

Cost Item	Units	@/ day	Qty/ day	Pdn Cost/ day	Pdn cost/ mth	Pdn Cost/ Year1
Direct costs3:						
Fresh curry leaves	Kgs	1.8	1,000	1,800	46,800	561,600
Packaging materials	Pcs	0.07	100	7	182	2,184
Subtotal					46,982	563,784

General costs (Overheads)

Labour	300	3,600
Utilities	400	4,800
Selling and Distribution	100	1,200
Administrative expenses	100	1,200
Shelter	100	1,200
Depreciation (Asset write off) Expenses	97.92	1,175
Sub-total	1,098	13,175
Total Operating Costs	48,080	576,959

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

Project product Costs and Price Structure in US $

Item	Qty / day	Qty/yr	Unit cost	Pdn/yr	UPx	TR
Essence Bottles	150	46,800	12.33	576,959	15	702,000

Profitability Analysis Table in US$

Profitability Item	Per day	Per Month	Per Year
Revenue	2,250	58,500	702,000
Less: Production and Operating Costs	1,849	48,080	576,959
Profit	401	10,420	125,041

Government facilities and Incentives

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

Market analysis

The essence extraction from curries' leaves is a rural micro enterprise activity and has good demand in domestic as well as international market. Areas of concentration would include restaurants, hotels, retail/grocery stores and tourist centers.

Sources of Supply of equipments

All equipments can be got in Uganda