

ICE DROP COMPANY LIMITED

**BUSINESS PLAN
FOR
BEVARAGE AND PACKAGING (BOTTLES) MATERIAL PRODUCTION PLANT**

ICE DROP COMPANY LIMITED

1.0 Introduction

ICE DROP COMPANY LIMITED is a private limited liability company registered in Tanzania with Certificate of Incorporation No. 139477 dated 21st November 2017 planning to invest in beverages production and packaging materials.

1.1 Project Concept

The proposed project will involve renovation and purchasing machines and installation of machines to be used for the project. The company is targeting Dares Salaam, Coast, Morogoro, Dodoma, Lindi, and Mtwara region and up country market. The proposed project intends to develop soft drinks such as bottled water, juice, soda, etc., the soft drinks produced to be packed and distributed at affordable prices the project will employ adequately trained and experienced management and employees. The company plans to produce bottles for its use and other users

The business plan by **ICE DROP COMPANY LIMITED** a locally registered company, the project promoters are confident of mobilizing financial resources through equity and long-term loans from financial institutions

This study will be used as a guiding tool and will be presented to TIC for obtaining a certificate of incentives to facilitate the smooth implementation of the project.

1.2 Location

The Rice and flour milling and Packaging plant is to be located at **Plot No. 30 Block E, Mwanambaya, Mkuranga, Dar es Salaam, Tanzania**

1.3 Mission Statement

Beverages facilities with customized services

1.4 Vision Statement

ICE DROP COMPANY LIMITED

To be a leading company in beverages production and distribution within the East Africa

1.5 Audited Reports

ICE DROP COMPANY LIMITED is audited by a local reputable auditing firm based in Dar es Salaam, Tanzania.

1.6 Company Values

- Competitive
- Efficiency
- Affordable
- Customized services

1.3 The Sponsors

ICE DROP COMPANY LIMITED will be sponsoring this project. The Company is currently jointly owned by two shareholders

Share Holders	% of Share	Nationality
Constantine Francis Mumba P. O. Box 80386 DAR ES SALAAM	50	Tanzania
Jacqueline Nahumu Lema P. O. Box 80386 DAR ES SALAAM	50	Tanzania

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1.4 ICE DROP COMPANY LIMITED PROJECT

The company main business objectives include the following:

Proposed project intend to develop soft drinks such as bottled water, juice soda etc, the soft drinks produced, packed and distributed at affordable price

1.5 Objective of the study

The purpose of this study is to work out the technical and commercial viability of the project

1.6 Optimizing Manufacturing

The bottled water industry involves a relatively light manufacturing process, meaning it does not require any heavy transformation processes. Impacts considered in the manufacturing phase are primarily related to energy required for the entire production process at the factory level. This includes the transformation of packaging materials into bottles, product bottling (pumping, storage, treatments (if any), filling), securing with secondary packaging and storage until finished products are shipped outside of the factory.

1.7 Chlorine Dosing System

Raw water may contain living micro-organisms and organics which are objection a Membrane as it may cause fouling to deteriorate the performance. Even water may contain ferrous which can be oxidized to ferric oxide which is settling down in storage tank. We have offered a Hypo chlorite dosing system for this purpose. About 3-4 ppm of sodium hypo chlorite solution is dosed in raw water storage tank. This reacts with water to form hypo chlorite acids which acts as disinfecting agent.

For this purpose one no. of HDPE hypo chlorite solution preparation tank along with one nos. of dosing pumps are provided. Required suction / discharge pipe work in pvc construction is provided with isolation valves.

Dosage rate is adjusted as per the actual requirement, which may vary on case to case basis

Raw Water Storage Tank

Raw water is required in for storage of chlorinated water having appropriate capacity. The tank is fitted with PVC pipe work & isolation valves and suitable type of level indicator.

Raw Water Supply Pump

A Horizontal Centrifugal type of pump in Stainless Steel construction has been provided for supplying Raw water to Pressure Sand Filter Unit. Necessary Suction / discharge pipe work in s.s construction with isolation valves are also provided up to PSF Unit.

Pressure Sand Filter

Raw Water is first filtered by filtration unit in series prior feeding R.O. Plant. Pressure Sand Filter Unit is provided for removal of suspended matters & turbidity from raw water. PSF Unit is a SS vertical Pressure Vessel. Internally, it is fitted with bottom collecting system. Uniform grades silica quartz sand is charged on the supporting media of pebbles and gravels. This unit is fitted with SS frontal pipe work and Multiport Valve externally. During service cycle water is passed in down ward direction through sand bed, thus entrapping suspended matter & turbid particles. Over a period of time, sand bed gets choked due to suspended matters resulting higher pressure drop and lesser flow. At this stage filter bed need to be backwashed.

When pressure drop across the sand bed increases beyond the specified limit (0.5 kg/cm²) or quality of filtered water deteriorates, whichever is earlier. Regeneration involves backwash & rinsing of Sand Bed as below. For backwashing service water is passed in reverse direction of service cycle to loosen the filtering media bed. Due to this, entrapped suspended matters get

free and come out along with effluent water. Backwashing is continued for about 10- 15 minutes or till the effluent coming out is clear For Rinsing of Sand Bed: Service water is passed in down ward direction to settle down the sand bed. The effluent water is drained for about 5 minutes time to ensure all unclear water is drained down.

Smb's Dosing System

The Chlorinated water may oxidize the membrane and to avoid the same precautionary we have provided Sodium MetaBiSulphite dosing system Dosage rate is 4-5 mg/liter. A HDPE chemical preparation tank with an electronics diaphragm type dosing pump is provided for this.

Activated Carbon Filter

Natural water may contain Colour, Odour, Chlorine & Organics in different proportion, which is undesirable for potable application, and hence, it is necessary to remove the same from water. If raw water is chlorinated for disinfection, it is necessary to remove the free Chlorine feeding to R.O System. Chlorine being a strong oxidizing agent, it damages R.O. Membranes. Activated Carbon can remove Chlorine, Odour, & Colour while passing the water through carbon bed along with Odour & colour. This Carbon granules having larger surface area and specific property to absorb organics. ACF Unit is a FRP vertical pressure vessel. Internally it is fitted with strainer on bottom collecting system. The unit is fitted with SS frontal pipe work & MPV externally. A granular activated carbon is charged on the supporting media of Coarse & Fine Silex. During service cycle water is passed in down ward direction through Carbon Bed, which removes Chlorine & Odour from water.

When pressure drop across the Carbon Bed increased beyond the specified limit of (0.8 kg/cm²) or quality of filter water deteriorates, whichever is earlier the unit is isolated for regeneration. The regeneration involves, backwashing & rinsing of Carbon Bed. Over a period of time, life of carbon gets exhausted which can be checked during laboratory testing. Particularly iodine value is

most important for this application. Generally carbon is replaced once in a year.

Anti Scalent Dosing

The hardness salts of calcium & magnesium are likely to be precipitated if concentration exceeds its solubility limit & it may faults the membranes resulting into scaling which ultimately leads to poor treated water quality from R.O. System. To prevent this a anti Scalent dosing (scale inhibitor) dosing system is provided. Normally a scale inhabitator like Perma care 191 or equivalent chemical is dosed in feed water. Dosage rate is 4-5 mg/liter. A HDPE chemical preparation tank with an electronics diaphragm type dosing pump is provided for this.

2.0 The Product Market

The market survey carried out reveals that the current demand for soft drinks in Tanzania is high, current price of bottled drinking water, soda and juice in Tanzania has attracted the company to venture in this business, the average price of bottled drinking water of one liter in Dar es Salaam is US\$ 0,5 , in up country the price is more than that almost 25% higher than Dar es Salaam, the same cost apply to other soft drinks.

The competitive advantage of the company's products is quality produced and customer care services,

The company will be producing various soft drinks such as bottled drinkingwater, soda, juice etc

2.1 Competition

Tanzania has a good number of soft drinks produced domestically and other imported from Kenya, South Africa, UAE, Uganda, Rwanda etc the big challenge for the above mentioned is price charged. It is very expensive and most of low income earners can not afford the price, and bad enough juice imported are made with additive and juice concentrated ,the quality is questionable that why theICE DROP COMPANY LIMITED came in to bridge the

came which have been left by existing companies such as Ufresh, Sayona, Azam, Jambo etc brand such to mention few

2.2 **Special Strengths of DRASHTI MINERALS LIMITED**

- The customer care provided by the company
- New technology used by the company
- Directors experience in soft drinks business
- Availability of fresh water

2.3 **Marketing Strategy**

According to expert, personal selling is the most effective method for marketing. In order to reduce sunk costs, the project will use various marketing strategies such as:

- Internet
- Specialized magazine, news paper
- Radio
- Television
- Posters
- Sponsorship etc

The project products will be aggressively promoted to the domestic market and skilled personnel will be recruited

2.4 **Product Pricing**

The pricing policy for the project will be based on the service cost and competition levels from substitute services available in the Tanzania market considering various variables namely:

- Service positioning
- Gain market share from competitors
- Stimulating and increasing demand and

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Achieving profitability and liquidity financial performance goals, the general price of the company for each product will be lower by 10% compared with the current price.

2.5 **Products**

Soft drinks produced will meet WHO guidelines, TFDA, and TBS, state-of-the-art technology will be used, and water will be treated to conform to the bacteriological standard using a microfilter, activated carbon filter, and ultraviolet rays, the treated water enters an automatic bottle filter and sealer. The sealed water bottles are packed and ready for the market

3.0 **Project Management and Manpower Requirements**

ICE DROP COMPANY LIMITED will be under the Management with vast experience in managing various soft drinks businesses, the project will be directly managed Managing Director assisted by Managers who will comprise the management team. 25 staff will be directly employed.

3.1 **Monitoring and Evaluation**

The Management has full commitment to ensuring goods produced maintain the safety and standards required in the market. The quality control unit will establish a system of routine checking and getting feedback from customers, management philosophy is through business process, managers will strive to ensure compliance with standards and the safety of the products and customers they serve.

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4.0 PROJECT INVESTMENT COST

The estimated capital investment cost of the project is US \$ 1,500,000

ICE DROP COMPANY LIMITED COST STRUCTURE US\$

PARTICULAR	
Land and Buildings	200,000.00
Machinery & Equipment	450,000.00
Motor Vehicles	200,000.00
Furniture & Fixtures	10,000.00
Pre exp	15,000.00
Others	25,000.00
Working Capital	600,000.00
TOTAL	1,500,000.00

For the project to be a reality a total investment amounting to US \$1,500,000 is needed for the production of Capacity 4m of pp buckets, 500,000 HDPE jerry cans, 12m cartons of beverages per year

4.0 Financing pattern

The project will be financed by long term loan US\$ 7000,000 and Equity US\$700,000

5.0 Aspect of Project Sustainability

The project sponsors having studied market conditions and the infrastructure in Tanzania are convinced that the project will be able to operate undisturbed. The Government support for industrialization and rises of middle income earners gives them assurance of a steady market. The peace and tranquility that exist in Tanzania is another aspect of assured business sustainability.

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6.0 Monitoring and Evaluation

The monitoring and evaluation tools will be applied in running this project as well, the project sponsors are determined to cooperate fully with the government and other stakeholders for smooth business running.

7.0 Financial Analysis

7.1 Considerations and Assumptions:

The corporate tax charged is 30% of the profits. The capital investment allowance is 50%. The capital assets are exempted from customs duty and Value Added Tax. The straight-line method to depreciate the project's capital items has been applied.

Revenues have been conservatively estimated based on the experience of the promoters and trends in the bottled drinking water and beverages industry in general.

7.2 Financial Statements:

7.3 Projected Revenue

For projection purposes, it is assumed that the economic life of the project is five years and that revenue from bottled drinking water business from the first year of operation.

ICE DROP COMPANY LIMITED PROJECTED REVENUE LTD

	1	2	3	4	5	6	7	8
Revenue	2,000,000	2,200,000	2,420,000	2,662,000	2,928,200	3,221,020	3,543,122	3,897,434

7.4 Projected Profit and Loss Statement

The Income and Expenditure Statement shows the projected income for the 8 years period. The position depicted is that the project earns profit throughout its life. Accumulated after tax profits grow from. US\$487,550 in first year to US\$ 2,854,013 8th year

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ICE DROP COMPANY LIMITED PROJECTED INCOME & EXPENDITURE STATEMENT (US\$)

	1	2	3	4	5	6	7	8
Revenue	2,000,000	2,200,000	2,420,000	2,662,000	2,928,200	3,221,020	3,543,122	3,897,434
Cost of raw materials	1,200,000	1,320,000	1,452,000	1,597,200	1,756,920	1,932,612	2,125,873	2,338,461
Profit before Depreciation & Interest	800,000	880,000	968,000	1,064,800	1,171,280	1,288,408	1,417,249	1,558,974
Interest	56,000	48,000	32,000	24,000	16,000	8,000	0	-
Depreciation	47,500	47,500	47,500	47,500	47,500	47,500	47,500	47,500
Net Profit before Tax	696,500	784,500	888,500	993,300	1,107,780	1,232,908	1,369,749	1,511,474
Tax (30%)	208,950	235,350	266,550	297,990	332,334	369,872	410,925	453,442
Profit After Tax	487,550	549,150	621,950	695,310	775,446	863,036	958,824	1,058,032
Accumulated Profit	487,550	722,900	989,450	1,287,440	1,619,774	1,989,646	2,400,571	2,854,013

7.5 Projected Cash Flows

This is shown in the financial statements. The project has a positive end-of-year cash flow from year 1st, i.e. US\$ 591,050 of operation to the 8th year i.e. US\$ 6,808,647

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ICE DROP COMPANY LIMITED PROJECTED CASH FLOW " US\$"

SOURCES:		1	2	3	4	5	6	7	8
Profit before interest and depreciation	-	800,000	880,000	968,000	1,064,800	1,171,280	1,288,408	1,417,249	1,558,974
Equity	800,000								
Loan	700,000								
Total Sources	1,500,000	800,000	880,000	968,000	1,064,800	1,171,280	1,288,408	1,417,249	1,558,974
Applications:									
Capital expenditure	860,000	-	-	-	-	-			
working Capital & Others	640,000								
Cash	-	591,050	644,650	701,450	766,810	838,946	918,536	1,006,324	1,105,532
Tax	-	208,950	235,350	266,550	297,990	332,334	369,872	410,925	453,442
Sub total	1,500,000	800,000	880,000	968,000	1,064,800	1,171,280	1,288,408	1,417,249	1,558,974
Total applications	1,500,000	800,000	880,000	968,000	1,064,800	1,171,280	1,288,408	1,417,249	1,558,974
Accumulated cash		591,050	1,471,050	2,172,500	2,939,310	3,778,256	4,696,792	5,703,116	6,808,647

7.6 Projected Balance Sheet

The projected Balance Sheet of the projected is shown in the financial statements under the same heading. Equity of the project increases from US\$**800,000** in the first year of operation to US \$ 1,858,032 in the 8th year

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ICE DROP COMPANY LIMITED PROJECTED BALANCE SHEET " US \$"

Fixed Assets	-	1	2	3	4	5	6	7	8
Opening balance	-	860,000	812,500	765,000	717,500	670,000	622,500	575,000	527,500
Total Long-term Assets	-	860,000	812,500	765,000	717,500	670,000	622,500	575,000	527,500
Less depreciation	-	47,500	47,500	47,500	47,500	47,500	47,500	47,500	47,500
Closing balance	-	812,500	765,000	717,500	670,000	622,500	575,000	527,500	480,000
Working capital	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000	640,000
Accumulated cash	-	5,228,925	10,841,315	16,944,944	23,592,365	30,831,385	38,745,593	47,394,936	56,856,357
Total assets	640,000								
Financed by									
Loan	700,000	700,000	700,000	700,000	700,000	700,000	700,000	700,000	-
Equity	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000
Net profit	-	487,550	549,150	621,950	695,310	775,446	863,036	958,824	1,058,032
Total equity	800,000	1,287,550	1,349,150	1,421,950	1,495,310	1,575,446	1,663,036	1,758,824	1,858,032
Long term loan	700,000	700,000	600,000	500,000	400,000	300,000	200,000	100,000	-
Total debts	700,000	700,000	600,000	500,000	400,000	300,000	200,000	100,000	-
Total equity and debts	1,500,000	1,987,550	1,949,150	1,921,950	1,895,310	1,875,446	1,863,036	1,858,824	1,858,032

7.7 Projected payback period

Total investment is US \$ 1,500,000 cash accumulation 3th year is US \$1,801,150.00 which is more than the initial investment by US\$ US\$ 301,150 the project payback Period is within 3 years,

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ICE DROP COMPANY LIMITED PAYBACK PERIOD

Year	Profit After Tax	Depreciation	Total Cash Flow	Accumulated Cash Flow
1	487550	47,500.00	535,050.00	535,050.00
2	549150	47,500.00	596,650.00	1,131,700.00
3	621950	47,500.00	669,450.00	1,801,150.00
4	695310	47,500.00	742,810.00	2,543,960.00
5	775446	47,500.00	822,946.00	3,366,906.00
6	958824.16	47,500.00	1,006,324.16	4,373,230.16
7	1058031.576	47,500.00	1,105,531.58	5,478,761.74

7.8 Loan repayment schedule

The total loan is US \$ 700,000 and interest is 8% charged annually, loan is to be repaid within 7 years as indicated below:

ICE DROP COMPANY LIMITED PROJECTED LONG-TERM LOAN REPAYMENT
OF US\$

Year	principle	Loan Interest (8%)	Total Amount Paid	Loan Balance
0				700,000
1	100,000	56,000	156,000	600,000
2	100,000	48,000	148,000	500,000
3	100,000	40,000	140,000	400,000
4	100,000	32,000	132,000	300,000
5	100,000	24,000	124,000	200,000
6	100,000	16,000	116,000	100,000
7	100,000	8,000	108,000	0
TOTAL	700,000	224,000	924,000	

8.0 ECONOMIC ASPECTS

Implementation of this project will have the following social and economic values

- The project is an ideal option for utilization of Government support for industrialization

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- The project will create employment for **25 people** on permanent contract basis as well as on temporary basis.
- It will create more business opportunities for local suppliers which will also have a trickledown effect on environmental issues.
- It will generate substantial revenue for the government in the form of corporate tax, value-added tax, and pay-as-you-earn.
- The project will have the transfer of knowledge and skills to manufacturing sector
- The project will generate foreign earnings

9.0 IMPLEMENTATION

Project implementation is expected to be relatively very short once the project has been approved it is estimated that implementation of the project will take hardly 9months to be completed within one year:

ICE DROP COMPANY LIMITED IMPLEMENTATION

S/N	ACTIVITY	PERIOD
1	Processing TIC Certificate of Incentive	April 2024
2	Renovation of building	June- September 2024
3	Placing order of machines	April – June 2024
4	Installing machines	July-September 2024
4	Recruitment	June 2024
5	In house training	June -September 2024
4	Testing production	September –November 2024
6	Commercial operations	November 2024

9.0 CONCLUSION & RECOMMENDATIONS

The project is technically feasible, financially viable, and economically sound, provided the sponsors will manage it efficiently.

It is recommended that the project be approved by Tanzania Investment Centre and be granted the TIC Certificate of Incentives with its associated privileges and benefits as provided for under the Tanzania Investment Act, 1997.