WATERCOM LIMITED

PROPOSED BUSINESS PLAN
FOR
PLASTIC PRODUCTION INDUSTRIES IN KISARAWE 11 INDUSTRIAL AREA, TEMEKE DISTRICT, DAR ES SALAAM REGION, TANZANIA

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List of Abbreviations

BSF- Blow-Fill-Seal
CAPEX – Capital Expenditure
COMESA- Common market for eastern and Southern Africa
CSI - Corporate Social Investment
EAC – East Africa community
EIA – Environment Impact Assessment
GDP – Growth Domestic Products
KVA –Kilovolt Amperes
MT – Metric Ton
NBS – National Bureau of standard
NEMC – National Environment Management Council
OPEX – Operating Expenditure
SADC –Southern Africa Development Community
SKU- Standard keeping units
SWOC - strengths, weaknesses, opportunities and threats.
TANESCO – Tanzania Electric Supply Company
TIC- Tanzania Investment Centre
TZS – Tanzania Shilling
TZS-Tanzania Shillings
US – United State Dollar
US$ - United State Dollar
VAT – Value Added tax

EXCUTIVE SUMMARY

Tanzania has become a key player in fruit processing and packaging industries. The industry has high growth rates as demand for plastic goods and machinery in Tanzania registers a steady growth. The country's overall economy is currently on a growth path. The country has experienced several years of strong economic growth (ranging from 6.5-7.2% in 2020 and it is now one of the fastest growing markets for plastic goods and machinery in Eastern Africa.

In an effort to strengthening the country economy, the Government of Tanzania cited integrated of plastic and beverage industries as one of the potential revenue and job creation sector, its important is not only to social economic development, but has positive significantly towards economic development.

The Watercom Limited decided to establish plastic production industries in Dar es Salaam region for production of plastic and plastic cap products whereas some of raw material will be collected locally and some will be imported for factory productions.

Watercom Limited is a limited liability company, registered in Tanzania under Certificate of Incorporation No 154135340 issued on the 16th November, 2012. The project will be located at Kisarawe 11 industrial area, Temeke, Dar es Salaam Region, Tanzania.

The proposed project is estimated to cost a total of US$ 25,085,286.13, The Current asset of US$ 2,216,576 fixed assets 24,346,156US$ and total liquidity of 3,470,177US$. The business plan has an assumption all capital investment will be recovered within 8 years for 10 year projected economic life,

The production capacity of the plant is based on 240 working days excluding Holidays and Sunday. The factory capacity is 168,0007MT and 180,000MT of plastic and plastic cap respectively per day. Capacity utilization of the plant is 75% - 100%. The proposed project is a complete set of modern technology and all machines will be imported from well-known Asia brands (India/China), after being over hauled, run 20-25 years.

The development of a large and complex project such as WATERCOM LIMITED is necessarily accompanied by multiple risks during all the phases of the project development, construction, operation and maintenance. The right approach to manage risk must be taken into account. Based on the Impact Investment Index analysis, the company can develop projections that the project can deliver both value for money in the context of broad socioeconomic impact and return on investment while complying with Governance requirements.

The development of this project will be funded by private finances. The company acting through its various shareholders and structures will provide the initial risk capital amounting to 25,085,286.13 US$, the whole amount will be raised from shareholders.

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the

financial analysis, the proposed investment options in the meat processing plant as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, Watercom Limited through professional consultative manner, will continue to find ways of implementing cost effective options given time and financial resources that will be made available. Financial analysis results show that when the construction of integrated plant facility is financed 100% by shareholders it gives an IRR of about 12.26%. The computed IRR is well above Dollar market of the annual loan interest rate of (8.00%) which is technically interpreted that the project is financially viable. The payback period for the project is estimated at 8 years, which is within the range for this type of investment. Sensitivity analysis results also favor the project. Financial analysis for the project has shown feasible returns. Based on the investment scope and the assumptions taken in this Business Plan, the project will not face any difficulties during establishment, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

1.0. INTRODUCTION

1.1. Plastic Manufactures industry in Tanzania

Tanzania has become a key player in plastics and packaging industry where plastic goods and expertise are in high demand. Tanzania's plastic industry is reporting high growth rates as demand for plastic goods and machinery in Tanzania registers a steady growth. The country's overall economy is currently on a growth path. The country has experienced several years of strong economic growth (ranging from 8-12% in 2020) and it is now one of the fastest growing markets for plastic goods and machinery in eastern Africa. Some of the areas identified as opportunities for international companies include plastics production machinery (PME) as well as plastics material resins (PMR). Not to mention the high demand for plastic goods that has been growing throughout Africa. Many entrepreneurs often see an opportunity where others see hurdles. As expected, the growing African economy is spurring growth in the continent's plastics industry.

WATERCOM LIMITED is matching grants opportunity for businesses in Tanzania that wish to develop or increase their ability to trade, support product quality improvement and the meeting of international standards to access potential markets within and outside Tanzania. In this respect the company is planning to establish integrated project of plastic manufacture in Dar es Salaam region in Tanzania that will support government initiatives endeavour to develop the business sector as an engine of pro-poor economic growth, in line with Tanzania's National Strategy for Growth and Reduction of Poverty (MKUKUTA).

The company has experience in plastic manufacture for several years in Africa managed to establish different factory in Africa but still their outputs/products are not processed to meet domestic and international market standard. Modern storage of plastic products will help to increase preservation, improve traditional method of storage by controlling drying, acidification, fermentation, sterilization, pasteurization, labeling, Increase fruits and fruit by product safety (traceability, food safety audits), trade development (effective trade fair participation, branding, supply chain management) and packaging.

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1.2. Why plastic industry in Tanzania?

In the East Africa region, one of the largest markets for plastics and packaging goods is Tanzania. The country has been importing plastic goods and machinery from all across the world in increasing quantities over the last five years and has emerged as a lucrative market for plastic goods in the region. Tanzania's plastic imports include plastics consumer items, writing instruments, rope & twines,

plastics & metal spectacle frames, strainers, laminated & non laminated packaging material, bio-medical products, kitchenware, woven sacks & bags, pet preforms, gift & novelties & other plastic products. In fact, some enterprising companies in Tanzania are turning waste plastic bottles into Coronavirus face shields and meeting the rising demand for face shields in East Africa.

In an effort to strengthening the country economy, the Government of Tanzania cited integrated industry of plastic industries as one of the potential revenue and job creation sector, its important is not only to social economic development, but has positive significantly towards economic development. Watercom Limited decided to expand integrated industry in Dar es Salaam - Tanzania factories as major expansion of related products from purchasing used plastic materials from end use products (recycling) as raw materials for production and some will be imported as additives to factory demand to suit customer satisfaction in Tanzania.

Considering such level of market growth and demand driven variables with notably absence of local manufacturing facilities already functioning in Tanzania and neighboring countries, the investment venture will become potentially profitable business.

As a part of integrated project, Watercom Limited considering packaging is alternatives of the synthetic polymer and help to enhance the shelf life of the food products while retaining their nutritional, biological and sensory quality. It helps in minimizing lipid oxidation; reducing weight loss, retarded respiration and enzymatic browning of the food products, that is, fruits & and others. The present review explores about the edible packaging, physiochemical properties and edible film forming ability of fruit wastes of apple, banana peel, citrus, grapes, jack fruit, mango, pomegranate, pineapple, and tamarind. Therefore, the by-products of the fruit processing can be utilized to develop edible coating and film to enhance the shelf life of food products at commercial scale.

Considering such level of market growth and demand driven variables with notably absence of local manufacturing facilities already functioning in Tanzania and neighboring countries, the investment venture will become potentially profitable business.

1.4. Integration plastic packaging products

WATERCOM LIMITED as part of plastic production industry, the company aimed to expand her production capacity by producing packaging materials ''What is the necessity of all packaging in food products?''. Plastic packaging degrades over time, which produces micro plastics. Micro plastics accumulate in the environment and nowadays traces of it can be found everywhere. To counter the accumulation of microplastics, less leakage of plastic waste should be achieved. This could be done by selling less single-use packaging and sorting waste better. A contribution to a solution for the packaging waste problem is performed in this project, by making a reusable packaging solution for liquid and food products sector. The

designed packaging the company has should be convenient for the consumer, which is why was set that the packaging solution should maintain or improve the consumer packaging experiences with reusable packaging. Watercom Limited plastic production company produces plastic products of quality design and sizes for company consumption and for other industries. The goal of project is to expand her production capacity to meet the market demand for plastic products at competitive price to be used in different sector to contribute to the development of Tanzania economy. The entire product range manufactured should follow the Weight and Measurement Act and packed accordingly in different standard keeping units (SKU). The product should be stored as per batch number allocated to particular product.

2.0. PROJECT OVERVIEW

2.1. The industry ownership and share distribution

WATERCOM LIMITED is a limited liability company, registered in Tanzania under certificate of incorporation No 92419 issued on the 18th July, 2012. The project is located at Plot No.4005 Kisarawe 11 area,Temeke, P O Box 2040 Dar es Salaam. Currently, the company manages to employ 167+ and indirect 1700 plastic production chain processing.

The factory is located Kigamboni District, in Dar es Salaam region. Anticipated raw material of factory will be imported from abroad. The establishment involves adding production line for plastic processing factories. This will involve cost of machine and fixing, operational and management cost, distribution of commodities etc.

The initial Authorized Share Capital of the company is TZS 10,000,000/= divided into 10,000 ordinary shares of Tshs 1,000 each and the company have the power to divide the original or any increased capital into several classes, and to attach thereto any preferential, deferred, qualified or other special rights privileges, restrictions or conditions. Unless the conditions of issues shall otherwise expressly declare, every issue of shares, whether preference or otherwise, or any such rights, privileges or conditions shall not be altered or modified except in accordance with the registered Articles or Association. The liability of the members is limited and the following names compromise the company ownership and principal shareholding as illustrated on

Table 2.1. Company Ownership and Principal Shareholders

S/No.	Shareholder's Name	Address	Number of Shares
1	Mr. Ameir Munif Nahdi	P O Box 20381, DAR ES SALAAM	250
2	Mr. Islam Edha Nahdi	P O Box 20381,	250

		DAR ES SALAAM	
3	Mr. Said Edha Nahdi	P O Box 20381, DAR ES SALAAM	250
4	Mr. Khalid Munif Nahdi	P O Box 20381, DAR ES SALAAM	250

The address for this company is;
WATERCOM LIMITED;
P O Box 2040, Plot 4005, Kisarawe 11 Area, Temeke,
DAR ES SALAAM, TANZANIA.
Email: info@watercomtz.com

2.2. Project Description

2.2.1. Plastic processing factory overview

WATERCOM LIMITED will produce plastic packaging whereas, the automated technology used is Blow-Fill-Seal (or BFS for Short) three-in-one technology is a sterile package technology. The machine adopting this technology achieves whole process of blow, fill and seal under sterile circumstance. The Technology combines all technical advantages to innovate and develop a Series plastic bottle blow-fill-seal machine self-independently. The machine has the advantages of good sterile stability, high inner quality and low cross contamination rate with low production cost and management cost. It could be widely used in production area for final sterilization products and sterile products, raising high attention of manufacturer for sterile fruits and food products.

2.2. Project Description

Watercom Limited aimed at expanding her own production line by importing complete set of plastic production by importing Machine and equipment's, the company will produce plastic of different types according to market and demand of her customers. The machines will have the capacity of producing 168Million/pcs/year and 300million caps/year, production will be done in a double shift of 16 hours per day.
The project is already in place since 2012 and the company manages to distribute said products all over the country. The anticipate raw materials will be collected to all farmer especially for fruits products and for plastic production will be imported from abroad. All machines are fully automated from receiving bay to final products production.
Plastic: Production process of plastic involves heated and pushing through a heated chamber by a screw molding. The plastic is forced though a die that creates the final stage of the part. Cooling the extruded plastic is cooled, cut or spool continues shape is spoiled or cut into length. The most popular and widely used

methods are, Blow Molding, CNC Machining, Vacuum forming, Polymer casting, Injection Molding, 3D Printing, Extraction and Rotational Molding.

The project envisages setting up modern equipment in installation of complete set for both production lines from Europe countries,

2.3. Product: Demand and Market Analysis

2.3.1. Market analysis - Plastic Products

The market analysis conducted indicates that there are few industries in Dar es salaam region producing plastic products for packaging products. The trade volume is still highly needed no other high-volume suppliers of different design according to customer demand and the company as consumable product different use. At present, companies source their requirements in China, the plastic supply base in Dar es Salaam is geared towards the manufacturing of low volume, hand-crafted, expensive products to service a niche market; this market requires the supply of a quality, volume fulfillment and pack-off service.

The Watercom Limited produce plastic products in different uses some includes, for water, fruits packaging, soft drinks, hard drinks, chemical etc. the company will sales at a whole marketing price so as to provide profit margin to other distributors. The company will sales her products at a wholesale price of start for Plastic preforms per KG at 0.07US$ and Plastic caps per KG at 0.02 US$.

2.3.2. Market potential for the Plastic products:

As indicated in the previous section, a plastic market has been identified. Market research indicates the Dar es Salaam regions market for plastic products is estimated to be US$813.75 million annually. WATERCOM LIMITED has set its sales target at US$ 680,529 in year one, increasing to 3.76US$ in year five. Year one target equates to a 3.3%, the sales increases by 5% there is the possibility of extending the business into the area of order fulfillment, which means on-line packing of products for customers. This will lead to efficiency, costs savings and shortened lead-time for potential customers. However, it is the director's intention not to enter this sector in the initial three years of operation.
The market for plastic products in world is to remain dominant for the highest growth in revenue as compared to other regions over the forecasted period, 2017-2025. The market in East Africa for plastic products is expected to witness above average growth for the further few years. The economic development in East Africa is projected to have a positive impact on the market for plastic products. In Tanzania plastic market is expected to have considerable growth in terms of market value owing to technological advancements in the plastic industries for these emerging economies which will witness a sizeable increase in the revenue contribution of the sales.

From the analysis in the preceding chapter, the marketing of the final products in the country will not pose a problem either as even if the export markets collapsed the local market itself is able to take up whatever the project will produce.

2.4. Technical Characteristic of the project.

2.4.1. Project Site analysis

Based on physical inspection of the proposed site, the availability of basic and essential industrial infrastructure such transport, water supply, effluent disposal, electric power supply, telecommunication system and security were all checked out and are ok for factory establishment. The realization of the project development requires successful completion of a number of necessary activities and facilities to enable a successful development of the project. The project location is already installed necessary utilities such as reliable supplies of energy, water, transportation, telecommunications services, waste disposal and other services are in place.

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2.4.2. Buildings and related fixed cost

The floor plan and elevation of buildings and other related structures will be rehabilitating to WATERCOM LIMITED as rented by the shareholders. However, the total cost of Land acquisition and registration, factory buildings, Storage of raw materials and finished plastic products structure has been done by the owner, the estimated cost of the structure is estimated to 1,066,522US$ as cost associate to rehabilitation of the structure, project fixed cost.
The industry also set budget as working capital which involves purchase of raw materials and factory overhead cost of 260,870US$. The minor rehabilitations costs are inclusive of contingency and reflect prevailing cost of building materials and labour costs in the country. Mostly local building materials will be used in the construction of the same.

2.4.3. Machinery and Equipment.

Proper machinery selection is one of the key problems in the development of an industry. The machinery must suit the two-fold requirements of the developing countries, i.e. it should be up-to-date to allow for competitive production. In view of the foregoing, an effort has been made to choose from modern technological alternatives, a level that strikes a balance between fixed costs based on depreciation and variable costs based essentially on wages.
The requirements of various items of equipment have been worked out taking into consideration the production programs, average equipment utilization and normal productivity level of an average worker etc. While working out details of

equipment required, it has been assumed that the plant will be working in a double shift of 16 hours a day, 25 days a month or a total of 300 days a year.

The projects machinery and equipment will be sourced from China and are estimated to cost 9,592,060US$, this includes, complete set plastic production, laboratory equipment for testing quality, flight charge. These cost assumptions are C.I.F Dar es Salaam and include installation, commissioning, consultancy, port charges and transport to the project site. Calculated depreciation of machines and other working facilities is estimated to cost 303,640US$. Others working facilities have already in place this includes weighing scales, mini laboratory equipment, communications, computers and other office equipment, standby power generator and miscellaneous machinery and equipment.

2.4.4. Motor Vehicles

50 heavy Box body trucks will be purchased in the first of production whereas truck will be purchased at a price of 62,608.7US$ each totaling to 3,130,435US$, and 100 Light Vehicles Lorries for indoor distribution at a price of 34,782.61 totaling to 3,478,261US$ will added for smoothening distribution and 3 forklift 7MT @ 43,478.26US$ totaling to 130,435US$. The total cost for motor vehicles and forklift is 3,434,217US$.

2.4.5. Furniture & Fittings and computers

This cost item includes the purchase of various office furniture: tables, chairs cabinets, safes, telecommunication gadgets, firefighting equipment, air conditioners etc. A budget of 10,870US$ will be allocated from general administration budget for furniture fittings and computer accessories. The total budget for furniture and fittings is small due to nature of industry as few or minor requirement of furniture and fittings.

2.4.6. Pre-Operational Expenses

Under pre-operational expenses are considered costs like company formation, preliminary project studies, business plan preparation costs, licenses, permits and authorization, including processing of TIC Certificate of Incentives, and legal fees, travelling expenses, initial recruitment and training expenses, and interest accrued during project construction period. Budget allocated for this is 86,957US$

2.4.7. Initial Working Capital

This item will mainly cover initial imports of raw materials estimated to last for the first three months of operations. Otherwise, raw materials will generally be

maintained at one month's stock and debtors at one month's sales volume constitute the biggest portion of current assets. Trade credits will be 15 days for the items listed. The initial working capital allocated budget is 652,174US$.

2.5. business plan Objectives

The objectives of this study are three-fold. First is to determine the viability of the proposed project and serve as a business plan for the company's development program. Secondly, the business plan will act as a supporting document in the company's application for Tanzania Investment Centre (TIC) Certificate of Incentives so as to access exemptions on duties, VAT deferments and other benefits and protections as statutorily provided for under Tanzania Investment Act (1997).
The project promoters have commissioned a reputable engineering and project planning consulting firm to advice on detailed technical and economic evaluation of the project and in determining its viability. As the report will be used to raise debt financing for the project, it is tailored to meet standard requirements of financial institutions in the region.

2.6. Project Cost & Financing Pattern

The proposed integrated project is estimated to cost a total of all machines and equipment for plastic production and for plastic division it will cost 24,346,156US$. All this include cost of buildings structure, machines and equipment, motor vehicles, initial capital investment, furniture's and fittings, Generators, Laboratory equipment, other charges, working capital, flight charges etc. The project will be implemented within 10 years. Estimated total investment is 25,085,286.13US$.

	EQUITY + LOAN	
1	**LOAN (0%)**	**-**
2	**EQUITY (100%)**	**25,085,286.13**

2.7. Project Capital Investment Summary

INVESTMENT SUMMARY - WATERCOM LIMITED				
S/NO.	**CAPITAL ITEM**	**No. OF UNITS**	**UNIT OF MEASURE**	**ESTIMATED COST US$**
NB	**ALL FIGURES IN USD**			
	A. LAND AND BUILDINGS			
1	Land acquisition		acres	1,066,522

2	Processing factory Building structure	1		824,783
4	Semi-permanent Building and office	1		43,478.26
5	Warehouse for finished goods	5		5,295,400
7	Fencing and gates			217,391
8	Laboratory for quality testing	2		52,174
9	packaging room	4		152,174
10	TP and waste disposal	1		91,304
	SUB TOTAL			**7,743,226**
	B. MACHINERY EQUIPMENT			
2	Production line of Plastic Division	1	set	8,695,652
2	Weighing scale Max 100MT	1	set	47,826
3	Diagnosis Equipment for testing quality	2	set	2,173.91
4	Weighing Measures - 0.1 to 100Kg	20	unit	10,435
5	Transformer	1	unit	88,043
6	cutting, Sorting and Packaging machines	2	Complete set	476,190
7	Reserve water tanks -durable	2	100,000Lts	130,435
8	Generator 500KVA	1	unit	76,087
9	Miscellaneous Tools and Equipment	1	unit	65,217
	SUB TOTAL			**9,592,060**
10	Computer and accessories	Office sets		8,696
	SUB TOTAL			**8,696**
	C. MOTOR VEHICLES			
11	Folk lift	3	unit	130,435
12	Light Vehicles Trucks	100	unit	3,478,261
13	Lorries with traillers	50	unit	3,130,435
	SUB TOTAL			**6,739,130**
	D. FURNITURE			
14	Office Furniture	set in lump sum		10,870
15	Continges			260,870
	SUB TOTAL			**271,739**
	TOTAL FIXED ASSET			**24,346,156**

	E. CURRENT ASSETS			
16	Pre operational expenses			86,957
17	Initial working capital			652,174
	SUB TOTAL			**739,130**
	TOTAL INVESTMENT			**25,085,286**

	EQUITY + LOAN			
1	**LOAN (0%)**			**-**
2	**EQUITY (100%)**			**25,085,286.13**
	TOTAL FINANCING			**25,085,286.13**

2.7.1. Project Financing

The project costs, including fixed costs (machinery, equipment, building renovations, motor vehicles, office furniture and equipment and pre-operation expenses will be financed by shareholders own resources 100%. Working capital requirements will be financed by shareholder or seeking short term bank financing in form of overdraft facility. The project promoters are planning to finance project cost in the following pattern:

2.7.2. Project Implementation

The project is fully in operational; some of machines and equipments will be imported as strategic plan for major expansion. Machineries and motor vehicles will be imported immediately while construction/renovation works are in process.

2.7.4. Explanatory Notes

The production capacity of the plant is based on 300 working days excluding Holidays and Sunday. The factory runs per day with a maximum of 31,200MT, 18,720MT of fruit and tomatoes respectively annually. For plastic division plant production capacity for perform 168Million Pcs and for plastic caps is 300Million production annually. Capacity utilization of the plant is 60% - 75%.

The proposed project is a complete set of modern technology with output capacity production of perform annual production of plastic in MT is 168,000 and

production of plastic caps 180,000MT respectively. All machines are from well-known Asia brands (India/China), after being over hauled, run 20-25 years.

2.7.5. Auxiliary Materials/ services

Falling under this category is plastic packing for bran, lubricants, grease and other miscellaneous items.

Utilities and service facilities that will need to be provided in this plant are as follows:

(i) Workshop
(ii) Electric power
(iii) Water supply
(iv) Miscellaneous facilities {Canteen; First Aid Kit, Storage and transport and Office Facilities}

(i) Workshop

It is necessary to make provision for a small workshop in the plant premises so that certain maintenance operations could be carried out following sudden breakdowns and major routine matters.
The facility will comprise of necessary machines like small centre lathe, drilling machine, welding set, soldering and gas-cutting equipment including complete electrical kit to take care of necessary electrical maintenance as well as to replace worn-out parts and periodic oil and greases needs for the plant. Equipment provision has been restricted to the minimum.

(ii) Electric Power and Generator

The proposed site will be supplied with industrial production 3-phase standard power supply from Tanzania Electric Supply Company (TANESCO), the electricity is available through the National Grid Line from Dar es Salaam to Temeke District, and if possible, the institute will request installation electric Transformer in case the available power supply is not enough to feed the collage.
As part of project budget, the collage will be installed with a stand by generator with a capacity of 500KVA that will be installed for power supply. Solar energy will be alternative source for administration and other miscellaneous activities and not processing activities. 500KVA power generator automated generator that will be connected to the plant and premises for standby power supply costing to 76,087US$.
The Watercom Limited will install an online UPS system that secures clean and uninterrupted power free of surges, brownouts, fluctuations and other power problems. The client manufactures PP non-woven fabrics in a high-temperature, high-pressure environment, in which electricity interruptions cause economic and

material losses. The total cost of generator not included to business plan as it's already in place.

(iii) Water Supply

Apart from the needs of electric power, water is also required for the actual process and other social needs. The proposed site has close to DAWASO water network, the agency is major supplier of water to urban and peri urban area in the city. While depending on water supply from DAWASCO, the main line is close to the proposed industry from Dar es Salaam city to Kigamboni/Temeke district area. The main line from this source will be tapped and let to the land site and water collected in an overhead reservoir provided at the top of the building of the plant. Adequate provision has been made in the project cost for the overhead tank and supply and laying of pipelines etc.

(iv) Miscellaneous Facilities e.g. First Aid Kit, Storage and Transport, Office Facilities etc

- Provision has been made in the project costs for necessary facilities for external telephones and fire alarm system;
- Sickness and ill-health are recognized to be among the cause of absenteeism and low morale leading to decreased production, increased waste and bad employee-management relations. Therefore, necessary provision has been made for the canteen and first aid facilities in case of accidents, sudden sickness etc.
- Storage and transport needs of the plant have been duly recognized and been attempted mostly manual. Regarding transport, twenty (50) trucks with a capacity of 32 MT will be purchased and other 100 light trucks will be purchased and some will be hired for plastic distribution
- Necessary provision for furniture and office equipment has been made in the Capital Cost estimates.
- Provision has also been made for the various types of weighing equipment in various sections for material-handling equipment etc.

2.7.6. Warehousing and distribution

Watercom Limited's warehousing service is ready to meet 24/7/365 with produced plastic products and raw materials imported. The efficiency of on-site combined with focal lift is already accommodated all needs and reduce supply chain costs. The industry uses electronics inventory management system means will ready for the efficiently movements of goods to next level.
The industry will use quick dispatch for fast distribution of final products and

packed by manual means or by semi-automatic machines. The industry will take Extra care is therefore taken to make it hygienic so that the products do not get spoiled during storage.

2.7.7. Waste management for industry

In order to create a sustainable society, it is necessary to develop effective utilization of all sorts of wastes. One of the major wastes from our living is fiber wastes. Fiber wastes are generally divided to nonindustrial (organic chemicals) and industrial wastes (inorganic Chemicals)
In his strategic management for a Watercom Limited; the industry has to move from an understanding of improvement at all costs to an understanding of continuous and balanced improvement once established. In modern times, environmental protection is being implemented not because it is enforced law, but as an administrative philosophy.
Rapid degradation in environmental conditions has changed at attitude of industrial managers toward ecological environment and had them consider ecology a significant factor while taking decisions related to industrial management. Parameters responsible for environmental pollution include chemicals discharged into air, water and soil as well as energy pollution all these will taken into consideration of the proposed project.

Noise pollution caused by poorly planned settlement programs is also included in this plan. Furthermore, safety and health of those working in production will be also taken into account by installing modern machines free from noise pollution.

3.0. MANPOWER REQUIREMENT - SALARY PROJECTION

3.1. Employment

The whole process of production lines is looking at providing direct employment to at least 165 permanent jobs on full implementation and operation of the project. The industry is divided into 3 Departments; Administration (15) Finance and Marketing (7) and operational (65) departments are already in place.

3.2. Recruitment

Recruitment of the 151 persons will be carried out by giving first preference to ex-technician from our local technical institutes such as Vocation Education Training Authority "VETA" and employees of Plastic factories in Tanzania, based on demonstration of skills and aptitude basis and their willingness to work for Watercom Limited. Careful methodology is being worked out by a competent management consultant who will set the job descriptions. To ensure that the right calibre is recruited. Recruitment of expatriate personnel will be carried out in consultation with the relevant authorities in Government and the collaborating agencies.

3.3. Training and the use of consultants

The Company plans to initially carry out on the job training for most of the technical staff to be dispatched to the project site by the suppliers of the plant which will be specified under sales agreement. In general, the company will ensure that employees acquire new skills and procedures to increase their productivity fourfold. Educational materials will be subsidized or paid for to motivate the workers to develop themselves.

Whereas the company will endeavor to obtain the best talents to fill the permanent posts in the organization, it is intended where necessary, to continue with the policy of hiring out some specialized skills by way of consultants. Alternatively, those skills not required throughout the year will be left to consultants. These include legal counsels, systems and management consultants. To ensure efficient and scientific management, operational manuals will be prepared for the core functions of the company.

3.4. Organization and Management

The project will be managed by qualified professionals given the vast experience that the promoters have acquired over years in running and managing similar businesses. The Board of Directors formulates policy and offer strategic business guidance to management and regularly monitor and evaluate performance of the company.

All the production line will be under the administrator under which the day to day leader/management of production line will be vested in the management team headed by administrator. The Administrator is to be assisted by qualified and experienced personnel.

Table 3.1. Proposed organization and manpower requirement for the plant is as follows:

A.ADMINISTRATION DEPARTMENT	FULL TIME STAFF	MONTHLY SALARY FULL TIME STAFF	TOTAL ANNUAL SALARY
DEPARTMENT	**POSTS**	**AMOUNT USD**	**AMOUNT USD**
EXCUTIVE DIRECTOR	1	1,000	12,000
LOGISTIC	2	500	12,000
DRIVER	2	270	6,480
SECURITY GUARD	10	150	18,000
SUB TOTAL	**15**	**1920**	**48,480**
B.FINANCE AND MARKETING DEPARTMENT	**FULL TIME STAFF**	**MONTHLY SALARY FULL TIME STAFF**	**TOTAL ANNUAL SALARY**
DEPARTMENT	**POSTS**	**AMOUNT USD**	**AMOUNT USD**
CHIEF ACCOUNTANT	1	800	9,600
ACCOUNTANT	2	600	14,400
PROCUREMENT OFFICER	2	500	12,000
DRIVER	3	270	9,720
TOTAL	**7**	**1370**	**36,120**
C. OPERATIONAL DEPARTMENT	**FULL TIME STAFF**	**MONTHLY SALARY FULL TIME STAFF**	**TOTAL ANNUAL SALARY**
DEPARTMENT PLASTIC PRODUCTION	**POSTS**	**AMOUNT USD**	**AMOUNT USD**
QUALITY CONTROL	2	650	15,600
ICT EXPERT	1	650	7,800
OPERATORS	12	320	46,080
MOLDING EXPERT	4	200	9,600
ELECTRICIAN	1	350	4,200
MECHANICS	1	350	4,200
HELPERS	4	250	12,000
DRIVERS	30	270	97,200
SUPPORTING STAFFS	10	200	24,000

TOTAL	65	1820	220,680
TOTAL	78	1970	0

GRAND TOTAL	165.00	5,110.00	305,280.00

4.0. FINANCIAL ANALYSIS

4.1. Production, Revenue and project viability

- The estimated revenue gain in selling plastic and plastic cap 11,895,652US$ sales excluding Value Added Tax.
- Net profit before tax is 3,166,537US$, second year earning is 3,478,628US$, which show the profit is increasing,
- Net profit after tax is 2,216,5763US$, second year earning is 2,435,040US$, which show the profit is increasing,
- Gross sales contribution in the first year of production is 29% which increases tremendously in the second years up to 10 years
- The expected sales increase annually is 5% while increase production cost is 3% which depends on inflation rate of the country, for Watercom Limited,
- Total investment cost of the project is 25,085,286.13US$ whereas the own equity is 100% and loan-able amount ZERO, project current assets for the first year is 2,216,576US$, fixed asset 24,346,156US$, Project liquidity is 3,470,177US$
- The end balance of project in cash flow statement is positive and increases tremendous.
- Testing the project viability is positive whereas IRR is positive 12.26%, and payback period of project is within 8 years. The Discounted Cash flow yields an Internal Rate of Return (IRR) of which is well above the assumed cost of capital.
- The end balance of project in cash flow statement is positive and increases tremendous.
- Cash generated from operation and net cash from operational activities increases positively of project (see cash flow sheet)
- Return on Investment is anticipated to be positive and above 1 which is above normal bank interest rate, which show in case promoter will borrow a commercial loan the project will recover bank loan within project economic life - see balance sheet,
- Depreciation of fixed assets and amortization of the pre-operational expenses rates used are as follows: land 5%, Civil Works/ Structures/Buildings 5.00% on straight line basis, Plant Machinery & Technical Equipment 12.50% on straight line basis, Motor Vehicles. 20.00% on straight line basis. The business plan use 12.5% as depreciation factors. Depreciation is amounted to 30,640US$ and the value of assets increases as asset depreciate
- Salaries and Wages have been based on the prevailing scales in the industry. There is provision of 20% to cover company contribution to

NSSSF (10%) and other social welfare (10%). Included to the total amount (see Income statement)

- Corporate Tax is fixed at 30% of taxable profits. The project is able to pay tax hence increase government revenue via GDP by 949,961US$ this is for both industries plastic production and fruits production
- The business plan has an assumption all capital investment will be recovered within 8 years for 10 year projected economic life,

5.0.RISK ANALYSIS

5.1. Risk Analysis

Risk is the probability that an event or action will adversely affect the organization. Risk assessment is the identification and analysis of risks associated with the achievement of operations, financial reporting and compliance goals and objectives. Risk management is a central part of the Watercom Limited. The Industry's management will determine the level of operations, financial and compliance risk they are willing to assume. Risk assessment is one of the Company's management responsibilities.

5.2. Macroeconomic risk analysis

Since early 1986, the Government of Tanzania has launched a comprehensive economic policy and stabilization plan with the aim to enhance the amount of infrastructure construction and improve the lives of the poor. During this time the main economic indicators significantly improved. However, uneven development of various region in the country, lack of relevant infrastructure in transportation, telecommunications, networking, health facilities, electricity and water supplies have proven to be investment barriers. Overall, Tanzania has a weak economic foundation but the project can achieve a greater impact in attaining social and economic goals for the country.

5.3. Financial risk analysis

a) Supply Risk: The risk in Primary production relates to supply of raw material, transportation and price fluctuations. There is no assurance of enough supply of raw materials in the local market instead mostly of raw materials are imported.

b) Processing Risks: The technology, machines and equipment used in nonwoven fabrics bags are in rudimentary stages all of which contribute to reducing production efficiency. Also quality/food safety and standards consideration in the production environment is limited. In nonwoven fabrics facilities operation know-how is very low as there are notarized labourers.

c) Sales/market risk: Placing value added products on the consumer markets bears risk of demand fluctuations and rejections through retailers. Furthermore, consumers are not aware of the plastic quality and safety criteria and are usually very price sensitive.

5.4. Other potential external risk

a) Lack of Governance: the governance mechanism in the value chain is underdeveloped, actors operate in an uncoordinated and unorganized fashion, and if rules exist they are often ignored;
b) Lack of market coordination: No lead organization has a coordinating role in relation to markets, technology and information such that producers and processors have no incentives for improving neither their product nor the chain process to promote sustainable income earning opportunities;
c) Unclear and conflicting roles regulatory authorities: Regulatory Agencies are responsible for quality control as well as enforcing TBS, NEMC etc, are regulatory role in issuing licensing etc
d) Industry associations: Associations are weak at all levels of the chain;
e) Operating procedures: Standard procedures are inadequately enforced, or not enforced at all, because of relaxed production and trade regulations; and
f) Integration: there is little vertical integration of importers, mid chain actors and processors.

5.4. Mitigating potential risk

The development of a large and complex project such as Watercom Limited is necessarily accompanied by multiple risks during all the phases of the project development, construction, operation and maintenance. The right approach to manage the project in a manner which is fairly and adequately address the multiple risks in a comprehensive as well as systematic manner is to use the risk analysis and management methodology which identifies the risk issues and their instrumental cause. In this regard, the risk is eliminated or effectively managed by the party best suited with capacity to handle or deal with the risk factors.

6.0. PROJECT SWOC ANALYSIS

The SWOC (Strengths, Weaknesses, Opportunities and Challenges) analysis provides a quantitative and qualitative review of internal strengths and weaknesses and their relationship with external challenges and opportunities. The results of the analysis provide a basis for determining the project future goals and for identifying strategies and initiatives that would be required to develop the project. The matrix below summarizes the project strengths, weaknesses, opportunities and threats.

Table 6.1: SWOC Analysis – Watercom Limited

SWOC ANALYSIS	
Strengths	**Weaknesses**
(a) Close proximity market and SME, (b) Preferential operational and incentives scheme enshrined in the TIC law c) Political will, the government's legal and policy framework support development of the project	i) Skilled labour to run factory, ii) Inadequate electric power, iii) Lack of working tools and machinery iv) Inadequate ICT system in place thus hindering effective and efficient service delivery. v) Weak collaboration/facilitative links with TRA,TPA,TANESCO and other Government departments which may create bottlenecks in investor facilitation;
Opportunities	**Challenges**
(a) Strategic location of Tanzania which is a hub for international business (b) Existence of preferential markets (c) e.g., EU, COMESA, EAC, USA; and regional markets like EAC, SADC and COMESA (d) Political and macroeconomic stability of the country (e) Goodwill and support from the (f) Government and the parent ministry;	i) High cost of doing business due to inefficiencies in the infrastructure system e.g., electricity, roads and air; ii) Lack of industrial linkages between research institutions and investors; iii) Government activities not fully coordinated and lack of appreciation of the TIC programs by other arms of the Government iv) regional competition from other countries investment and markets.

7. ECONOMIC AND SOCIAL ASPECTS

The project is also likely to have a positive impact on the economy of Tanzania as a whole by creating employment, and contributing to Government revenues through various taxes, which will be paid. It also has potential for substantial exporting to foreign markets specially to neighboring countries in the Great Lakes Region. In summary the following table will show impact investment index framework

7.1. Impact Investment Index Framework

Impact Investment Index		
Frame Work for WATERCOM LIMITED		
Performance Area	**Quantitative Indicator**	**Remarks**
Investment Capital	Total investment capital, CAPEX and OPEX US$ 25,085,286.13	Substantial amount of capital invested into the domestic economy.
Export Earnings	Indicative Annual sales of 100% earnings of 11,895,652 US$ out of annual average collection	Increased foreign earnings.
Job requirements	Job creation after plant in operation 2020-2021. DIRECT TANZANIAN JOBS 165 local employed, and over 16500 indirect SME (Small and Medium Enterprises) will be generated in Tanzania	• Reasonable number of direct job created to local Tanzanians with direct impact on poverty reduction through enhanced income generation; and • Improving skills development for Industrial production
Technology applied	High Tech Environmentally friendly machinery	• Enhancing technological transfer; and

		• Applied technology which is free from environmental pollution,
Other Implied Project Benefits		
▪ Increased sales to the Utility Companies providing services of electricity, water and sewerage, telecommunications; ▪ Increased business transacted by local banks and institutions providing financial services; ▪ Business opportunities for local entrepreneurs in market distribution channels, ▪ Business opportunities to contractors and sub-contractors during the minor construction phase; ▪ Increased regional intra-trade and international trade due to better infrastructure facility and links to markets; ▪ Increase of technology transfer & expertise to local employed staff, ▪ Capital spends in local economy over US$ 25.Million and ▪ Contribution to GDP growth through increased economic activities		

Based on the Impact Investment Index analysis, the company can develop projections that the project can deliver both value for money in the context of broad socioeconomic impact and return on investment while complying with governance requirements. In this regard therefore, Watercom Limited will promote the industrialization process in the country, create employment, attract new technologies, expand foreign exchange earnings and ultimately contribute substantially to the country's economic growth.

8.0. FINANCIAL MODELLING AND ANALYSIS

The Financial Modelling and analysis, is the main source of information for assessing the potential financial viability of the Watercom Limited. The analysis is based on the assumptions that have been taken for the implementation of the site development, demand and the associated potential investment requirements for a 10-year time period. The purpose of establishing integrated plant is to speed up the country´s economic development by being a catalyst for restructuring the existing local plastic industrial set up and attracting new, both foreign and domestic entrepreneurs to a liberalized legal business framework.

8.1. Project investment inputs

Expected quantities for production	
All cost and revenue in US$	
Plastic production, revenue projection	
Working days per month	20.00
Annual working days	240.00
Average production of Preform plastic in KG	560,000.00
Average production of plastic caps in KG	600,000.00
Annual production of Preform plastic in MT	168,000.00
Annual production of plastic caps in MT	180,000.00
Processed Plastic preforms per KG	0.07
Processed Plastic caps per KG	0.02
Annual sale plastic reforms in US$	8,765,217.39
Annual sale of plastic caps in US$	3,130,434.78
Total sales Revenue	**11,895,652.17**

8.2. Objective and Scope of Financial Model

8.2.1. Objective

The main objective of the financial modelling and analysis is to setup a financial model framework for potential generated revenues and operational & maintenance costs for the full operation of Watercom Limited based on the assumptions taken for the Market Analysis, the plan for the facility development, unit production costs and other overhead and operational charges.

8.2.2. Scope

The scope consists of a financial model that will be used to analyse the potential financial viability of the project based on the assumptions taken for the concept and scope of the integrated processing factory on the Market Analysis. The financial model has been developed in excel spread sheet and include information on costs, expenses and the subsequent sales revenue based on the average market prices and linked to the financial cash flow.

ANNEX I – INCOME STATEMENT

Income Statement Projections

(all numbers in US$

Revenue

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10		TOTAL
Annual sale plastic reforms in US$		8,765,217	9,203,478	9,663,652	10,146,835	10,654,177	11,186,885	11,746,230	12,333,541	12,950,218	13,597,729		**110,247,962**
Annual sale of plastic caps in US$		3,130,435	3,286,957	3,451,304	3,623,870	3,805,063	3,995,316	4,195,082	4,404,836	4,625,078	4,856,332		**39,374,272**
Total Operating Revenue	**-**	**11,895,652**	**12,490,435**	**13,114,957**	**13,770,704**	**14,459,240**	**15,182,202**	**15,941,312**	**16,738,377**	**17,575,296**	**18,454,061**	**-**	**149,622,235**

Expected Expenses

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10		Total
Salaries		305,280	314,438	323,872	333,588	333,588	343,595	343,595	353,903	353,903	364,520		3,370,283
Social Charges & Pension Payments		61,056	62,888	64,774	66,718	66,718	68,719	68,719	70,781	70,781	72,904		674,057
Consumable goods - raw materials		6,521,739	6,717,391	6,918,913	7,126,480	7,126,480	7,340,275	7,340,275	7,560,483	7,560,483	7,787,298		71,999,818
Administrative expenses		384,000	395,520	407,386	419,607	419,607	432,195	432,195	445,161	445,161	458,516		4,239,349
Fuel and lubricants for machineries and generators		432,000	444,960	467,208	490,568	490,568	515,097	515,097	540,852	540,852	567,894		5,005,096
Security services		86,400	88,992	91,662	94,412	94,412	97,244	97,244	100,161	100,161	103,166		953,854
Work wear and other related facilities		45,000	46,350	47,741	49,173	49,173	50,648	50,648	52,167	52,167	53,732		496,799
Insurance/licensing/healthy premium/other charges		36,000	37,080	38,192	39,338	39,338	40,518	40,518	41,734	41,734	42,986		397,439
Utilities - Electricity and water services		144,000	148,320	152,770	157,353	157,353	162,073	162,073	166,935	166,935	171,944		1,589,756
Other Costs													

	410,000	422,300	434,969	448,018	448,018	461,459	461,459	475,302	475,302	489,561	4,526,389
Total Operating Costs	**8,425,475**	**8,678,239**	**8,947,486**	**9,225,254**	**9,225,254**	**9,511,824**	**9,511,824**	**9,807,480**	**9,807,480**	**10,112,522**	**93,252,838**
Operational Net Earnings before Depreciation, Interest & Tax	**3,470,177**	**3,812,195**	**4,167,471**	**4,545,450**	**5,233,985**	**5,670,378**	**6,429,488**	**6,930,897**	**7,767,816**	**8,341,539**	**56,369,397**
%age Gross Contribution	*29*	*31*	*32*	*33*	*36*	*37*	*40*	*41*	*44*	*45*	*1*
Depreciation at12. 5% (Machines, Equipt.)	**303,640**	**333,567**	**364,654**	**397,727**	**457,974**	**496,158**	**562,580**	**606,453**	**679,684**	**729,885**	**5,073,246**
Net Earnings before Tax & Interest	**3,166,537**	**3,478,628**	**3,802,817**	**4,147,723**	**4,776,011**	**5,174,220**	**5,866,908**	**6,324,444**	**7,088,132**	**7,611,655**	**51,296,151**
Interest Paid (Bank Loan)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Tax (30%)	**949,961**	**1,043,588**	**1,140,845**	**1,244,317**	**1,432,803**	**1,552,266**	**1,760,072**	**1,897,333**	**2,126,440**	**2,283,496**	**15,431,122**
Net Earnings	**2,216,576**	**2,435,040**	**2,661,972**	**2,903,406**	**3,343,208**	**3,621,954**	**4,106,836**	**4,427,110**	**4,961,692**	**5,328,158**	**36,005,952**

ANNEX II CASH FLOW

Cash Flow statement from Investing Activities for ten years										
(all numbers in US$)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
CASH FLOW FROM OPERATING ACTIVITIES										
Cash receipts from Sales	11,895,652	12,490,435	13,114,957	13,770,704	14,459,240	15,182,202	15,941,312	16,738,377	17,575,296	18,454,061
Cash paid to suppliers and employees	(8,425,475)	(8,678,239)	(8,947,486)	(9,225,254)	(9,225,254)	(9,511,824)	(9,511,824)	(9,807,480)	(9,807,480)	(10,112,522)
Cash generated from operations	3,470,177	3,812,195	4,167,471	4,545,450	5,233,985	5,670,378	6,429,488	6,930,897	7,767,816	8,341,539
Dividends received*	0	0	0	0	0	0	0	0	0	0
Interest received	0	0	0	0	0	0	0	0	0	0
Interest paid	0	0	0	0	0	0	0	0	0	0
Tax paid	(949,961)	(1,043,588)	(1,140,845)	(1,244,317)	(1,432,803)	(1,552,266)	(1,760,072)	(1,897,333)	(2,126,440)	(2,283,496)
Net cash flow from operating activities	**2,520,216**	**2,768,607**	**3,026,626**	**3,301,133**	**3,801,182**	**4,118,112**	**4,669,416**	**5,033,564**	**5,641,376**	**6,058,043**
CASH FLOW FROM INVESTING ACTIVITIES										
Replacement of equipment	0	0	*0*	0	*0*	*0*	*0*	*0*	*0*	*0*
Proceeds** from sale of equipment	0	0	*0*	0	0	0	0	0	0	0
Net cash flow from investing activities	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
CASH FLOW FROM FINANCING ACTIVITIES										
Proceeds from capital contributed	25,085,286	0	0	0	0					0
Proceeds from loan	0	0	0	0	0					0
Payment of loan	0	0	0	0	0	0	0	0	0	0
Net cash flow from financing activities	**25,085,286**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
NET INCREASE/ DECREASE IN CASH	**27,605,502**	**2,768,607**	**3,026,626**	**3,301,133**	**3,801,182**	**4,118,112**	**4,669,416**	**5,033,564**	**5,641,376**	**6,058,043**
Cash at the beginning of the period	2,216,576	2,435,040	2,661,972	2,903,406	3,343,208	3,621,954	4,106,836	4,427,110	4,961,692	5,328,158
Cash at the end of the period	**29,822,078**	**5,203,647**	**5,688,598**	**6,204,539**	**7,144,390**	**7,740,066**	**8,776,251**	**9,460,674**	**10,603,069**	**11,386,201**

ANNEX III BALANCE SHEET

Pro forma balance sheet										
(all numbers inUS$	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
ASSET										
Current asset	2,216,576	2,435,040	2,661,972	2,903,406	3,343,208	3,621,954	4,106,836	4,427,110	4,961,692	5,328,158
Fixed asset	24,346,156	24,042,515	23,708,948	23,344,294	22,946,568	22,488,594	21,992,436	21,429,856	20,823,402	20,143,718
Liquidity	3,470,177	3,812,195	4,167,471	4,545,450	5,233,985	5,670,378	6,429,488	6,930,897	7,767,816	8,341,539
TOTAL ASSET	30,032,908	30,289,750	30,538,391	30,793,150	31,523,761	31,780,926	32,528,759	32,787,863	33,552,910	33,813,416
NET ASSET MINUS DEPRECIATION	**29,729,268**	**29,956,183**	**30,173,737**	**30,395,423**	**31,065,787**	**31,284,768**	**31,966,179**	**32,181,410**	**32,873,227**	**33,083,531**
EQUITY & LIABILITIES										
Equity	25,085,286	23,831,022	22,639,471	21,507,497	20,432,122	19,410,516	18,439,990	17,517,991	16,642,091	15,809,987
Reserves	0	0	*0*	0	0	0	0	0	0	0
Total Own Equity	**25,085,286**	**23,831,022**	**22,639,471**	**21,507,497**	**20,432,122**	**19,410,516**	**18,439,990**	**17,517,991**	**16,642,091**	**15,809,987**
Provisions	3,390,380	4,748,006	6,028,768	7,245,883	8,742,887	9,825,828	11,203,536	12,159,632	13,425,012	14,260,163
Long term loan	0	0	0	0	0	0	0	0	0	0
Short term Liabilities	1,253,601	1,377,156	1,505,499	1,642,044	1,890,777	2,048,424	2,322,653	2,503,787	2,806,124	3,013,381
Total Equity & Liabilities	**29,729,268**	**29,956,183**	**30,173,737**	**30,395,423**	**31,065,787**	**31,284,768**	**31,966,179**	**32,181,410**	**32,873,227**	**33,083,531**
NET FA/CL	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
CL/CA	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
DEBIT/CAPITAL RATIOS	0.16	0.20	0.25	0.29	0.34	0.38	0.42	0.46	0.49	0.52
ROI	8.8	10.2	11.8	13.5	16.4	18.7	22.3	25.3	29.8	33.7
BREAK EVEN POINT	7.02	6.31	5.69	5.14	4.38	3.97	3.42	3.09	2.68	2.41
BREAK EVEN RATIO	2.79	2.64	2.51	2.39	2.12	2.04	1.84	1.78	1.62	1.57
EQUITY/TOTAL LIABILITIES	84	80	75	71	66	62	58	54	51	48

ANNEX IV – INTERNAL RATE OF RETURN

IRR for the Project		
	(all numbers in US$	
	Initial Investment	-25,085,286
Year 1	Additional Annual Net Profit	2,216,576
Year 2	Additional Annual Net Profit	2,435,040
Year 3	Additional Annual Net Profit	2,661,972
Year 4	Additional Annual Net Profit	2,903,406
Year 5	Additional Annual Net Profit	3,343,208
Year 6	Additional Annual Net Profit	3,621,954
Year 7	Additional Annual Net Profit	4,106,836
Year 8	Additional Annual Net Profit	4,427,110
Year 9	Additional Annual Net Profit	4,961,692
Year 10	Additional Annual Net Profit	5,328,158
	IRR (in 10 years)	**12.26%**

The IRR above indicates that the expected return on the 25,085,286USD initial investment after 10 years is 12,26%.

ANNEX V – PAYBACK PERIOD

Payback Period Analysis				
	Year	Beginning Balance	Net Cash Flows	Ending Balance
Cost of investment	0.00	25,085,286.13	0.00	25,085,286.13
	1.00	25,085,286.13	2,216,575.59	22,868,710.54
	2.00	22,868,710.54	2,435,039.81	20,433,670.73
	3.00	20,433,670.73	2,661,971.95	17,771,698.79
	4.00	17,771,698.79	2,903,406.09	14,868,292.70
	5.00	14,868,292.70	3,343,207.96	11,525,084.74
	6.00	11,525,084.74	3,621,953.97	7,903,130.76
	7.00	7,903,130.76	4,106,835.54	3,796,295.23
	8.00	3,796,295.23	4,427,110.50	630,815.27
	9.00	630,815.27	4,961,692.42	5,592,507.69
	10.00	5,592,507.69	5,328,158.22	10,920,665.91

Payback Period	**8.00**	**Years**

8.0. CONCLUDING REMARKS AND WAY FORWARD

8.1. Evidence of project viability based on financial model and policy framework support

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both SWOC Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options in the meat processing plant as prescribed on this business plan have shown that the project is commercially viable. Nonetheless, Watercom Limited through professional consultative manner, will continue to find ways of implementing cost effective options given time and financial resources that will be made available. Financial analysis results show that when the construction of integrated plant facility is financed 100% by shareholders it gives an IRR of about 12.26%. The computed IRR is well above Dollar market of the annual loan interest rate of (8.00%) which is technically interpreted that the project is financially viable. The payback period for the project is estimated at 8 years, which is within the range for this type of investment. Sensitivity analysis results also favor the project. Financial analysis for the project has shown feasible returns. Based on the investment scope and the assumptions taken in this Business Plan, the project will not face any difficulties during establishment, according to the projected cash flow be in a position to accomplish repayment of the loan and start generating profit.

8.2. Policy Framework Support

The development of the WATERCOM LIMITED is designed to tape advantages of the current Tanzanian market-oriented reforms. The Project will be developed and established to accelerate the industrialization process. The vision 2025 emphasizes the importance of the allocation of public funds for strategic investments and private sector financing for development investments.

The 15 years Perspective Plan (2015-2025); Priotize private investment in the context of Public Private Partnership. The First Five Years Development Plan (2020-2025) recognizes the fundamental role of the private sector in enabling the government to allocate its fund to strategic projects to facilitate a higher level of development. MKUKUTA II (2020-2025) identifies Public Private Partnership as a means of increasing the level of stakeholder participation and of easing the financial burden on the government. It should be noted that existing public resources are clearly insufficient to meet Tanzanian's huge development needs. The increased use of private enterprises participation in development projects can help alleviate the financing gap. This approach is now applied by WATERCOM LIMITED to ensure development of one among the ultra-integrated plant to be developed in Temeke, Dar es Salaam Region. Private sector and investment have been recognized as the most significant potential source of additional funding required to facilitate development projects.

8.3. Conclusive Remarks and Way Forward

The development of this integrated plant will be funded by private finances. The company acting through its various shareholders and structures will provide the initial risk capital amounting to 25,085,286.13 US$, the whole amount will be raised from shareholders. The company will fund the development of the project minor rehabilitations of factory building, business offices, bulk storage facilities and purchasing machines as stated on this business plan. Before the Company engages into the development of this project as a private enterprise, it needs to accomplish the pre development activities to make way for the development of the designated project.

a) Apply for TIC certificate

The company by using this Business Plan and other required supporting documents should apply for the TIC Certificate at Tanzania investment centre or Dar es Salaam zonal Office. with this certificate, the company will be able to access tax reliefs which to a large extent will help to in reducing project costs, particularly in the purchasing of machineries and minor building of area of proposed industrial area.

b) Conduct Environmental Impact Assessment.

The company has to engage a consultant to conduct EIA in order to ensure that environmental and possibly other sustainability aspects are considered effectively in policy, plan and project development. The EIA Directive aims at introducing systematic assessment of the environmental effects of strategic land use related plans and programs. It typically applies to regional and local, development, waste and transport plans, within the country. EIA ensures that plans and programs take into consideration the environmental effects they cause.

c) Minor rehabilitation to suit integrated Industrial requirement

The company should engage a firm to make minor rehabilitation of existing structure that will suit integrated manufacturing requirements. The structure should include all vital service facilities described in this business plan. When possible, the process of design of the facility should be consultative insomuch that it should allow and incorporate ideas from experienced professionals from the industry.

d) Mobilizing Funds

As previously discussed on the Financial Analysis of this business plan, financing mechanism for the integrated plant should be scrutinized well before commencing the project implementation. There may be several options of financing the project development but the company will find the best option. The investment team should do consultation with relevant financial institutions (Banks and non-bank Financial Institutions), both within and outside the country. This exercise should be more effective if the team works closely with central government agencies, particularly TIC and the Ministry of Industry & Trade and Ministry of Investment.