

**JAMBO FOOD PRODUCTS COMPANY LIMITED**  
**PROPOSED BUSINESS PLAN**  
**FOR**  
**ESTABLISHMENT OF MILK PROCESSING FACTORY IN**  
**SHINYANGA TOWNSHIP, SHINYANGA REGION,**  
**TANZANIA.**



**Prepared by:**

Jambo Food Products Company Limited,  
Plot No. 1907, block NN,  
Shinyanga Municipality,  
P O Box 71,  
SHINYANGA  
Email: [info@jambogrouptz.net](mailto:info@jambogrouptz.net)  
Website: [www.jambogrouptz.net](http://www.jambogrouptz.net)

SEPTEMBER, 2024

<b>Table of content</b>	
<b>List of Abbreviations</b>	4
<b>Executive Summary</b>	5
<b>1.0. Overview of milk production in Tanzania.</b>	6
1.1. Economic and impacts.	6
1.2. The trend of dairy industry in Tanzania.	7
1.3. Competition and competitive advantage of Jambo Food Products company Limited	7
1.4. Ecological trends and impacts	8
1.5. Social context and impacts	8
1.6. Legal environment.	9
<b>2.0 Project Overview</b>	10
2.1 The Industry ownership and share distribution	10
2.2. Rationale of Jambo food product Company Limited in Milk Production	10
2.3 Project Description.	11
2.3.1. Dairy processing plant design and construction	11
<b>2.3.2. Equipment &amp; material selection</b>	11
<b>2.4. Milk/Dairy production process</b>	12
2.4.1. Milk collection and storage	12
<b>2.4.2. Milk production technology types</b>	12
2.4.3. Processed milk products.	13
<b>2.5. Milk collection, transportation and product distribution</b>	13
2.6. Demand, Marketing analysis and promotion	14
2.6.1. Demand analysis	14
2.6.2. market analysis	14
2.6.3. Product Positioning and Promotion	14
2.7. Company future plans	15
2.8. Project Cost & Financing Pattern	15
2.9. Project investment summary	15
2.10. Business Plan Objectives	16
2.11. Technical Characteristic of the project.	16
2.11.1. Project Location	16
2.11.2. Project Site analysis	17
2.11.3. Buildings and infrastructure	17
2.11.4. Machinery and Equipment:	17
2.11.5. Motor Vehicles	17
2.11.6. Furniture & Fittings	18
2.11.7. Computers & Accessories	18
2.11.8. Pre-Operational Expenses	18
2.11.9. Initial Working Capital	18
2.11.10. Project Implementation plan	18
2.11.11. Auxiliary Materials/ services	18
2.11.12. Warehousing and distribution	20
2.11.13. Waste management for industry	20
<b>3.0. Organization, Manpower Requirement and Proposed Salary Budget.</b>	21
3.1. Employment.	21
3.2. Recruitment	21
3.3. Management structure	21
<b>3.4. Organization and Management</b>	22
<b>4.0. Financial Analysis</b>	23
4.1 Production, Revenue and project viability	23
.	23
<b>5.0. Risk Analysis</b>	24
5.1. Macroeconomic risk analysis	24
5.2. Finance risk analysis	24

5.3. Other potential external risk	24
5.4. Mitigating potential risk	25
<b>6.0. Economic and Social Aspects</b>	26
<b>6.1. Impact Investment Index Framework</b>	26
6.2. Impact Investment Index (II) Framework	27
<b>7.0. Financial Modeling and Analysis</b>	28
7.1. Objective and Scope of Financial Model	28
<b>ANNEX I – INCOME STATEMENT</b>	29
<b>ANNEX II - CASH FLOW</b>	31
<b>ANNEX III – BALANCE SHEET</b>	32
<b>ANNEX IV – INTERNAL RATE OF RETURN</b>	32
<b>ANNEX V – PAYBACK PERIOD</b>	33
<b>8.0. Concluding Remarks and Way Forward</b>	34
8.1. Evidence of project viability based on financial model and policy frame work support.	34
8.2. Policy Framework Support	34

## **List of Abbreviations**

CAPEX – Capital Expenditure  
CIP – Clean in Place  
EIA – Environment Impact Assessment  
ESL – Extended Shelf Life  
EU – European Union  
GDP – Growth Domestic Products  
IRR – Internal rate of return  
KASHUWASA –Kahama Shinyanga Water Supply Authority  
Kg – kilo gram  
KVA –Kilovolt Amperes  
MIS - Management Information System  
MT – Metric Ton  
NBS – National Bureau of standard  
NEMC – national Environment Management Council  
OPEX – Operating Expenditure  
SIDO- Small Development Organization  
TANESCO – Tanzania Electric Supply Company  
TDB- Tanzania Development Bank  
TDL – Tanzania diary Companies  
TIC- Tanzania Investment Centre  
TZS – Tanzania Shilling  
UHT – Ultra-High Temperature  
US\$ - United State Dollar  
VAT – Value Added tax  
VETA - Vocation Education Training Authority

## **Executive Summary**

Jambo Food products Limited, is part of Jambo Group of Companies Ltd. and one of the largest manufacturer of carbonated soft drinks, fresh juices, and processing and bottling of water within East Africa. The company is based in Shinyanga, Tanzania.

The company is a well-established, registered in Tanzania with Certificate of Incorporation No: 84560 dated 18<sup>th</sup> July, 2011. In this respect the company is planning to establish Ultra-Modern Milk processing factory in Shinyanga Region by purchasing modern machines for different milk products. The project investment is approximately to 9.5Milion Euro which includes cost of purchasing machineries, Milk trucks and other related facilities.

Milk and milk products will be sold in within local market in Tanzania and surplus will be exported to the neighboring EAC countries. The project will prompt the growing demand of the milk and milk products.

The whole process of production lines is looking at providing direct employment to at least 73 and 1000 indirect jobs on full implementation and operation of the project.

Testing the project viability is positive whereas IRR is positive 12.89% and payback period of project is within 4 years. The Discounted Cash flow yields an Internal Rate of Return (IRR) of which is well above the assumed bank interest rate for capital injected ONLY if shareholder are willing to seek loan from commercial banks.

The development of a large and complex project such as Jambo Milk project 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.

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.

On the basis of all the analysis done on this Business Plan on all aspects of assessment on both Analysis, market analysis, risk analysis and the financial analysis, the proposed investment options in the milk processing plant as prescribed on this business plan have shown that the project is commercially viable.

Nonetheless, Jambo Food Products Company 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.

The payback period for the project is estimated at 4 years, which is within the range for project economic life. Sensitivity analysis results also favour 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 difficulties during the establishment and implementation.

## **1.0. Overview of milk production in Tanzania.**

Milk production in Tanzania is carried out under two major production systems. These are the subsistence traditional and the commercial dairy production systems. Within the traditional system, milk is mainly produced by indigenous cattle raised as dual purpose animals that are for both milk and meat production.

Within the commercial dairy production system, improved dairy cattle of exotic dairy breeds are kept. This system is characterized by commercialized large, medium and small holder dairy farms. Generally, in Tanzania, dairy farms with cows ranging from 1–5 cows per household are considered to be small dairy farms while those with 10–50 and more than 50 cows per farm are considered to be medium and large dairy farms respectively.

Smallholder dairy farming is mainly concentrated in the urban and peri–urban areas of Arusha, Kilimanjaro, Kagera, Iringa, Mbeya and Tanga. There are few companies (e.g. Tanga Fresh Ltd, ASAS Dairies– Iringa, Kahama Fresh, SHAF A Agro Ltd, Azam dairy products,) in the market that are slowly expanding but at the same time facing many obstacles in the process of selling milk and milk products. The major problems include strong competition from attractively packaged and cheap imported milk products, small domestic market, lack of financial credit and difficulties in sourcing large amounts of milk of stable quality.

### **1.1. Economic and impacts.**

The Tanzania economy has recorded impressive economic growth rates in the last several decades averaging at GDP growth of over 6%. The agriculture sector has been growing at an average of 3.2 %. The livestock sector contributed 7.1% of national GDP in 2022/2023. The dairy industry contributed 30% of the livestock sector GDP and 1.2% of the national GDP.

The dairy industry, also known as the milk industry, forms a very important part of the global economy, with a greater employment multiplier effect throughout the milk value chain. The industry interlinks with upstream actors such as smallholder dairy agripreneurs, pastoralists, and dairy cooperatives who serve as sources of raw milk for dairy processing plants.

Similarly, the dairy industry interlinks with downstream actors such as supermarkets for processed milk products. The dairy processing plants' operations generate both processed milk products and employment opportunities (i.e., direct, indirect, and induced employment) along the milk value chain.

Milk production is currently estimated at 1.6 billion Litres per annum. this represents 130% increase over the last decade. Average producer prices fluctuate seasonally but have fallen dramatically over the last decade from about US\$ 0.4 in 2010 in some areas to about US\$ 0.0.93 in 2024, implying a more stabilized market and better distribution.<sup>1</sup> The production of surplus marketable milk is more consistent and suffers less season fluctuations than the traditional cattle which depend entirely on seasonal availability of pastures and water.

---

<sup>1</sup> Tanzania Dairy Industry Overview-2019, Sokoine University of Agriculture, 2019

The gap between local supply and demand for processed milk is providing an opportunity for investments in local milk processing. The market strategy would be to attract more consumers away from the informally marketed milk by offering quality and fairly priced processed milk products to consumers, especially the low income and middle-income segment. Hence the market outlook for processed milk is still very good given the prevailing growth in the economy of Tanzania.

Therefore, there is a ready market for amount of milk produced as long as the quality, quantity and selling prices of milk and milk products are right. However significant competitors are observed from outside suppliers who influence value and price. To penetrate such market, the project has to offer high quality milk and milk products at prices and delivery packages that are competitive and attractive to consumers. Products will be introduced at a time of highest demand, i.e. During the dry season or during the festive season.

## 1.2. The trend of dairy industry in Tanzania.

Tanzania is implementing its 2nd five-year development plan 2020-2025 whose main focus is industrialization of the economy. The dairy industry has shown great potential to contribute to the industrialization agenda. The number of industries has increased from 78 in 2019/20 to 99 in 2022/23 (Table 1).

**Table 1: Performance of Milk Processing Industry in Tanzania**

<i>Item</i>	<i>2019/20</i>	<i>2020/21</i>	<i>2021/22</i>	<i>2022/23</i>
Number of dairy plants	78	81	82	99
Number of working	68	65	76	93
Installed capacity p.a. (x10 <sup>6</sup> )	236.7		276.5	314.7
Processed/annum (x10 <sup>6</sup> )	61.2	40.1	56.2	70.9
Installed capacity p.a. (000 l/d)	648.4		7575	862.1
Processed (*000 l/d)	167	112.3	154.1	194.3
Capacity utilization %	25		20.3	22.5

## 1.3. Competition and competitive advantage of Jambo Food Products company Limited.

Several milk processing plants have been installed around the major urban cities. They include Tanga Fresh in Tanga region, Dar Fresh in Dar es Salaam Region, Azam in Dar es Salaam and Zanzibar, ASAS in Iringa region, Galaxy Dairy Food Ltd (Kilimanjaro Fresh) and Grand Deman Ltd. in Arusha. There are also numerous small-scale milk processor in various parts of the country including, Kondiki and Nnornga Women Dairy Cooperative in Kilimanjaro Region, Shambani Millk in Morogoro, Njombe Milk Factory in Njombe and CHAWAKIMU in Cost region. Recent reports by TDB (2020) indicate there are about 99 milk processors, most of theme micro and small-scale units.

Products manufactured include pasteurized milk, Mtindi, UHT and ESL milk, yoghurt and some cheese. Currently, the largest market for market milk (Pasteurised, UHT and ESL) is the major cities of Dar es Salaam, Dodoma and Arusha with Dar Es Salaam

accounting for more than  $\frac{3}{4}$  of the market share. Some smaller cities and towns such as Bukoba, Geita, Shinyanga, Kahama and Mwanza are undersupplied with processed milk products. However, some of the milk processing plants are also closed, mostly due to management problems.

Table 2: Major Milk Processing Plants in Tanzania

<i>S/No</i>	<i>Dairy Plant</i>	<i>Location</i>	<i>Product</i>	<i>Capacity L/Day</i>
1	Tanga fresh Ltd	Tanga	Fresh milk, Cultured milk, Yoghurt, Cream, Butter, Ghee and Cheese, UHT milk	120,000
2	ASAS DAIRIES	Iringa	Fresh milk, Culture milk, Yoghurt, Butter, Ghee and Fresh flavored milk, UHT milk, ESL Tetra Fino	100,000
3	Milk com Dairy (Dar fresh)	Dar	Fresh milk, Culture milk, Yoghurt, UHT milk and fresh flavored milk in Tetra Brick; ESL Tetra Fino	50,000
4	Azam Dairy	Dar /Zanzibar	UHT milk, low fat milk; full fat-1 litre	150,000
5	Galaxy foods & Beverage	Arusha	Fresh milk, Cultured milk, Yoghurt, cream, ESL-Plastic pouch	50,000
6	Grand deman	Arusha	Fresh milk, Cultured milk, Yoghurt, cream,	30,000
7	CEFA njombe	Njombe	Fresh milk, Cultured milk, Yoghurt, cream, Cheese	30,000

#### 1.4. Ecological trends and impacts

The dairy herd is predominantly held by smallholder farmers concentrated in the Northern Highlands, Southern Highlands and in the coastal zone (Tanga, Dar es Salaam, Morogoro and Coast regions). Around the Lake Zone, Kagera region has the highest concentration of dairy cattle numbering about 20,438 head and a sizeable herd of indigenous cattle (730,000). There about 54 large scale dairy farms (LMP, 2016). The traditional cattle herd is concentrated in seven regions (Shinyanga, Morogoro, Arusha, Tabora, Singida, Manyara, and Mara) which account for 65% of total cattle population; the highest cattle population density (70-100 head/km<sup>2</sup>) is found in Mwanza, Shinyanga and Manyara regions (NBS, 2020).

#### 1.5. Social context and impacts

Milk production is a predominantly rural occupation involving hundreds of thousands of households. The sub sector is therefore a source of livelihoods and nutrition security for millions of households and generation 3-4 employment opportunities for every 100 liters of milk that is produced and processed. The potential poverty reducing impacts cannot be overemphasized.

## **1.6. Legal environment.**

Since 1994/95 The Government divested its interest in operation of milk processing and privatized the seven government owned plants operated by the defunct Tanzania dairies Ltd. (TDL). Since then all the investments in milk processing are being done by the private sector. The Government actively encourages and promotes private sector investors in the milk value chain. Jambo Food Products Company Limited is therefore a registered and regally recognized entity that is responding to the government initiatives contributing to industrialization of the national economy in accordance with the 3<sup>rd</sup> Five Year Development Plan 2020-2025.

## 2.0 Project Overview

### 2.1 The Industry ownership and share distribution

Jambo Food Product Company Limited is a limited liability company, registered in Tanzania under certificate of incorporation No 84560 issued on the 08<sup>th</sup> July, 2011. The office of the company is located at Plot No. 1 Shinyanga Municipality, in Shinyanga Region. Currently, the company manages to employ 2000+ people with different professional.

The company is anticipating to establish Milk processing plant to the above mentioned plot and expected raw material will be collected from the farmers to a specified collection point/centers to the Lake Zone.

The initial Authorized Share Capital of the company is TZS 100,000,000/= divided into 1,000 ordinary shares of TZS 10,000 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 1 below.

**Table 2.1: Company Ownership and Principal Shareholders**

<i>S/No.</i>	<i>Shareholder's Name</i>	<i>Address</i>	<i>Number of Shares</i>
1	Salum Khamis Salum (TZ)	P O Box 71, SHINYANGA	800
2	Seleman Khamis Salum (TZ)	P O Box 71, SHINYANGA	200

The address for this company is;  
Jambo Food Products Company Limited;  
Ibadakuli Industrial área,  
Plot No. 1907 Block NN,  
Shinyanga Township,  
Mwanza – Shinyanga Road,  
P O Box 71,  
SHINYANGA.  
United Republic Tanzania.

### 2.2. Rationale of Jambo food product Company Limited in Milk Production

Jambo food products company Ltd 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 **Ultra-Modern Milk processing factory** purchasing modern machines from the reputable international company Tetra Pak the Swedish-Swiss multinational food packaging and processing company. The company is experienced in packaging, filling machines and processing for dairy, beverages, cheese, ice cream and prepared food.

The investment cost of the project is estimated to 9.5Milion Euro which is equivalent to 10. 6US\$.Tthe company anticipate to import machineries with the processing capacity of 10,000Litres per hour which will be the biggest investment in Tanzania as compared to ASAS Dairies– Iringa, SHAFa Agro Ltd, - Iringa and Azam dairy products – Dar Es Salaam hence, **contribute substantial investment in Tanzania.**

The project will **support Government initiatives** endeavor 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).

In an effort to strengthening the country economy, the Government of Tanzania cited Milk processing projects 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.

Considering such level of market growth and demand driven variables with notably absence of modern commercial farming, Jambo Food considering commercial milk processing are alternatives of the synthetic polymer and help to enhance the shelf life of the **food products while retaining their nutritional, biological and sensory quality.**

The establishment of milk process factory will be **an import substitution project** which is expected to considerably reduce Tanzania’s import of imported milk outside Tanzania.

In conclusion, therefore, considering the benefits of improved business transactions, efficiency in regional intra-trade and international trade, as well considering the economic development history and prevailing realities of trade; there is **clear empirical evidence and of feasibility** in establishing this project in Tanzania.

## **2.3 Project Description.**

### **2.3.1. Dairy processing plant design and construction**

One enemy of any dairy plant is unwanted pathogens. Because dairy products are ideal breeding grounds for these unwanted invaders if not handled correctly, engineers must mitigate risk by following hygienic design principles. When it comes to pathogens, prevention is better than cure. Hygienic design principles guide both equipment and material selection and CIP processes to support food safety, as discussed below.

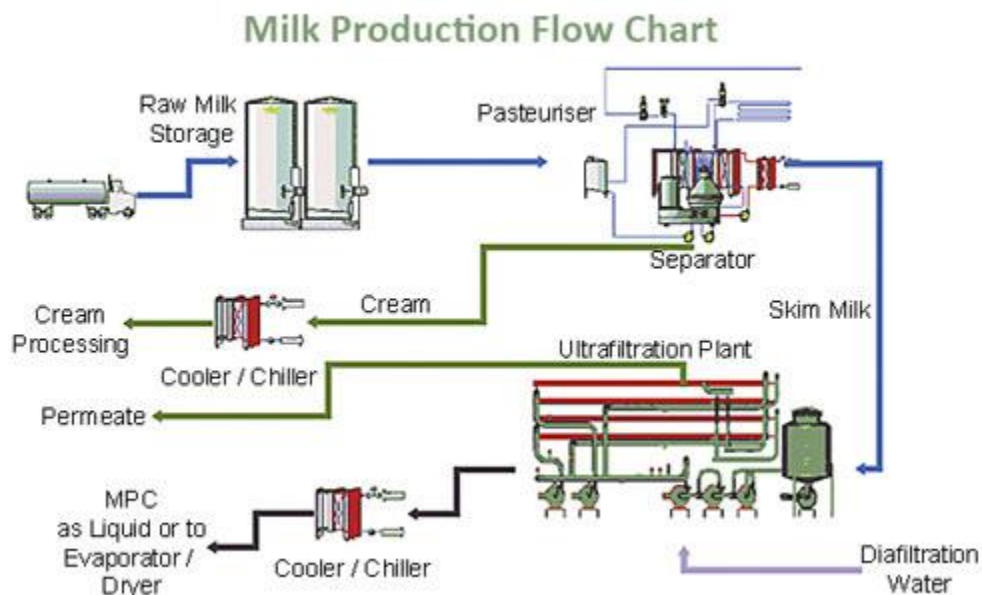
### **2.3.2. Equipment & material selection**

Facility planners must ensure that drains can be emptied when installing all pipes, tanks, and valves. For example, there can be no ledges inside a tank that could prevent it from being fully drainable. Also, careful installation of hygienic valves ensures they function and drain optimally.

When selecting tanks and vessels for use within a dairy plant, facility planners should also consider several other hygienic factors such as avoiding non-cleanable crevices, assessing and selecting agitator blades for their accessibility and cleanability, and ensuring that the location, size, and length of tank top ports enable cleaning. Selecting appropriate construction materials matters just as much as the overall equipment design. Inappropriate materials in the processing environment allow corrosion and pathogens to evade sanitation activities, putting the product at risk of contamination. For example, the right grade of stainless steel can help prevent chlorinated caustic cleaners from forming pits inside the equipment. Also, elastomers react differently to the fat content, temperatures, and other characteristics of any given product. Selecting the right type of elastomer based on variables in the manufacturing process is key.

## 2.4. Milk/Dairy production process

The milk production process includes: **raw milk collection, filtration, preheat, homogenization, sterilization, cooling, and filling.** The milk production equipment includes **refrigerated milk storage tank, joint filter, plate heat exchanger, homogenizer, plate pasteurizer, cooling tank, CIP cleaning system.**



### 2.4.1. Milk collection and storage

**Refrigerated milk storage tank** is used in milk collection center, pasture, dairy plant, food factory, dairy farmers for milk collection, cooling and storage. Refrigerated milk storage tank is an important support equipment in mechanized milking pasture, as well as hand milking pastures. Besides, **it can cool and store other liquid materials so as to preserve them from bacterial reproduction.**

### 2.4.2. Milk production technology types

Generally, there are 2 kind of milk in the market.

- a. **One is UHT milk.** To ensure long time preservation and long distance transportation, it is processed by ultra-heat treatment: to **heat up the milk to 75-90°C and last 15-16s.** With short sterilization time, the production efficiency is high. The key of UHT technology is to eliminate bacteria and minimize shelf life. UHT milk has over half a year of shelf life, but it also sacrifices some nutrition.
- b. **The other is pasteurized milk.** To preserve the milk nutrition as much as possible, some milks are processed by pasteurization technology: to **heat up the milk to 62-65°C and last for 30 min.** With this technology, it can eliminate 97.3%~99.9% bacteria in milk. There remain some thermophiles and heat resistant bacteria and spores, but they are most lactic acid bacteria that benefit human body. Besides, pasteurized milk has high requirement on the milk source.

### 2.4.3. Processed milk products.

Jambo food products company limited intend to produce the following products;

- a. Dehydrated Products
  - Skimmed Milk Powder
  - Whole Milk Powder
  - Dairy Whitener
  - Coffee Whitener
  - Nutritional Supplements
    - o Protein Supplements
    - o Specialized Dairy Based Food Products
    - o Infant Milk Substitutes
    - o Convenience Foods –Dairy Based
- b. Fermented Dairy Products
  - o Dahi/Curd
  - o Yoghurt & Flavored
  - o Lassi – Sweet or Salted
  - o Butter Milk Plain – Plain or Spiced
  - o Drinking Yoghurt and
  - o Probiotic Drink

### 2.5. Milk collection, transportation and product distribution



Milk collection centers are needed whenever milk is to be collected from farmers. The company will organize milk collection centre to all six regions in lake zone. The collection centre will have milk transport tankers, an extensive range of Stainless Steel Milk

Collection Accessories made using first-grade raw materials. Milk Strainers, Milk Can Plungers, Stainless Steel Milk Collection Trays, SS Milk Buckets, SS Milk Collection Trays, SS Milk Measure Sets, Milk Can (SS/Aluminum/Plastic), Milking Pails, Milk Sample Bottle, Sample Bottle Stand, Milk Lactometer Jar, and many other accessories. As these milk collection accessories are manufactured using high-grade stainless steel this ensures high durability, reliability, robust construction, and high tensile strength.

## **2.6. Demand, Marketing analysis and promotion**

### **2.6.1. Demand analysis**

Milk and milk products will be sold in within local market in Tanzania and surplus will be exported to the neighboring EAC countries of Kenya, Uganda, Rwanda, Burundi and South Sudan. Establishment of the project in Shinyanga region was prompted by the growing demand of the food products in the Lake Zone, also the closeness of the project site.

Currently, as the company brands itself in Sukuma word “*JAMUKAYA*” mean *Made at Home* has brand to access large Lake zone market. Market intelligence conducted in domestic market still huge need more for produced products. For analysis purpose, the company expects to export 25% of its products and the remaining balance will be sold locally.

In this regards introducing of new products will not pose a problem either as even if the export markets collapsed the local market itself is able to take up whatever production is produced.

### **2.6.2. Market analysis**

Market for pasteurized milk, UHT milk, fermented milk and yoghurt have shown a growth trend during the last decade. Currently processed milk and milk product have attracted a good market in big cities of Dar es salaam, Arusha, Dodoma, Kilimanjaro and Mwanza where by 70% of the processed milk products is being sold through specialized agents and milk shops.

The urban markets are deficient in good quality processed milk. As a result, informal milk traders cover the gap by supplying adulterated, poor quality raw milk. Organized collection, processing and marketing of milk is done by very few dairy plants, especially in the Lake zone. The plan is to market Jambo Milk and milk product in urban areas and cities and towns of Bukoba, Geita, Mwanza, Kahama, Shinyanga, Bariadi, Singida as well as Dodoma and Dar es Salaam. For effective penetration of the target markets brand development and promotion strategies will be adopted.

### **2.6.3. Product Positioning and Promotion**

Promotion and advertisement of the products will be done and consistently reviewed. Moreover, a very effective promotion network will be established through various media such as TV, Newspaper, Participation in Exhibitions (Nane Nane, Saba Saba), Radio,

Directory listings such as Yellow Pages and Social media among others.

## 2.7. Company future plans

In order to fulfil higher demand of milk and milk products, the company future plans;

- ✓ The company is now in negotiation with Ministry of Livestock so as to joint vent with the government by running the Mabuki farm. Currently the only utilized land is 1,937Ha out of 9,793Ha. Over 80% of land is not utilized.
- ✓ Milk farmers are vital element for the company production, Jambo Food Product company limited, will conduct to farmers and will make an effort to train the rural on basic extension services of animal medication and feeding, and support them to be independent rural entrepreneurs in the dairy sector. It also helped farmers realize the real potential of livestock through better animal health and extension so as to increase milk production and good quality milk preservations.
- ✓ The company After identifying a need for a more hygienic and practical way of distributing staple, the company are now in mutual agreement to international company “*Tetra pack*” in purchasing machineries and high quality packaging materials to one of the Scandinavia - Sweden.

## 2.8. Project Cost & Financing Pattern

The proposed estimated to coast 9.5Milion Euro equivalent to 10.6Milion US\$ this includes; (including purchase of Machineries, motor vehicles, packaging production line, working capital, furniture’s, etc.

## 2.9. Project investment summary

<b>INVESTMENT SUMMARY</b>	
<b>FIXED ASSETS</b>	
LAND ACQUSTION	N/A
<b>TOTAL</b>	-
<b>BUILDINGS AND STRUCTURES</b>	
SERVICE WING (ADMINISTRATION, CHANGING ROOM, MEETING ROOM ETC)	20,000.00
UTILITY ROOM (BOILER, AIR COMPRESSSOR, IBT)	100,000.00
COLD ROOM WITH FREEZER COMPARTMENTS	150,000.00
PRODUCTION PACKAGING ROOM	35,000.00
MILK PROCESSING ROOM AND RECEIPTION DOCK	30,000.00
LABARATORY	25,000.00
MATERIAL AND EQUIPMENT STORE	15,000.00
TSF POND FOR WASTE MANAGEMENT	60,000.00
<b>TOTAL</b>	<b>435,000.00</b>
<b>MACHINERIES AND EQUIPMENTS</b>	
BOILER, AIR COMPRESSSOR, IBT MACHINES	450,000.00
COMPLETE SET OF LAB EQUIPMENTS	60,000.00
MILK PROCESSING MACHINES AND PACKAGING	150,000.00
<b>WATER AND FACILITIES</b>	<b>1,150,000.00</b>

<i>MILK COLLECTION FACILITIES FROM COLLECTION POINT</i>	<i>300,000.00</i>
<i>REFREGERATION COLLING SYSTEM</i>	<i>200,000.00</i>
<i>PRODUCTION MIXING</i>	<i>60,000.00</i>
<i>PRODUCTION PACKAGING MACHINES</i>	<i>180,000.00</i>
<i>AN EXTENSIVE RANGE OF STAINLESS STEEL MILK COLLECTION ACCESSORIES</i>	<i>450,000.00</i>
<i>12 COLLECTION CENTRES</i>	
<i>WEIGHING SCALES</i>	<i>10,000.00</i>
<i>MILK REVERVIOR TANKS 6</i>	<i>90,000.00</i>
<i>OTHER EQUIPMENTS</i>	<i>50,000.00</i>
<b>TOTAL</b>	<b><i>3,150,000.00</i></b>
<b>MOTOR VEHICLES</b>	
<i>MILK TRANSPORT TANKERS TRUCKS 60</i>	<i>4,500,000.00</i>
<b>TOTAL</b>	<b><i>4,500,000.00</i></b>
<b>OTHER FACILITIES</b>	
<i>FENITURE AND FITTINGS</i>	<i>30,000.00</i>
<b>TOTAL</b>	<b><i>30,000.00</i></b>
<b>SUB TOTAL FIXED ASSETS</b>	<b><i>8,115,000.00</i></b>
<b>CURRENT ASSET</b>	
<i>PRE OPERATIONAL EXPENSES</i>	<i>9,000.00</i>
<i>INTIAL WORKING CAPITAL</i>	<i>2,476,000.00</i>
<b>SUB TOTAL CURRENT ASSETS</b>	<b><i>2,485,000.00</i></b>
<b>TOTAL INVESTMENT</b>	<b><i>10,600,000.00</i></b>
<b>EQUITY</b>	
<i>LOAN (0%)</i>	<i>-</i>
<i>EQUITY (100%)</i>	<i>10,600,000.00</i>
<b>TOTAL EQUITY</b>	<b><i>10,600,000.00</i></b>

## **2.10. Business Plan Objectives**

The objectives of this study are two. First is to determine the viability of the proposed integrated project and serve as a business plan for the company's development program. Secondly, it is meant to facilitate the 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).

## **2.11. Technical Characteristic of the project.**

### **2.11.1. Project Location**

The project will be developed at Jambo Food Products Company Limited compound, Shinyanga Township; the project is just along Mwanza to Shinyanga road, 6-7 Km from Shinyanga Municipality centre. For economic benefit, related industries can be constructed to the same areas, as there is a room to establish other plants. The project is just nearby tarmac road connecting Mwanza to Shinyanga leading to Kenya country.

### **2.11.2. 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.

### **2.11.3. Buildings and infrastructure**

The floor plan and elevation of buildings and other related structures are in place. However, the total cost of Land acquisition and registration, factory buildings not included to this business plane since are already in place. Storage of raw materials and finished products structure, plant machinery equipment, transportation/ distribution system, administrative vehicles and other project fixed cost have been estimated at US\$ 435,000, which includes purchasing of machines, fork lift and motor vehicles The industry also set budget as working capital of 2,476,000US\$ and pre-operational cost of already done. 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.

### **2.11.4. Machinery and Equipment:**

The projects machinery and equipment will be sourced from Scandinavian countries are estimated to cost US\$ 3,150,000. Others will include mini laboratory equipment, communications, computers and other office equipment, standby power generator and miscellaneous machinery and equipment. These cost assumptions are C.I.F Dar es Salaam and include installation, commissioning, consultancy, port charges and transport to the project site.

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 is assumed that the plant will operate for a double shift with approximately of 8 hours per single shift, (makes 16 hours/day) in a day, 26 days a month or 312 days per year. But for the first 6 months the plant will operate for 12 Hours per day

### **2.11.5. Motor Vehicles**

60 Stainless steel heavy Tanker truck will be purchased at a price of 75,000US\$ each totaling to 4,500,000USD for collection fresh milk from sited collection centers in lake zone regions. The company has numbers of truck for distribution finished goods.

### **2.11.6. Furniture & Fittings**

This cost item includes the purchase of various office furniture: tables, chairs cabinets, safes, telecommunication gadgets, firefighting equipment, air conditioners etc. a budget of 30,000USD has been allocated for the smooth implementation of the project.

### **2.11.7. Computers & Accessories**

It is the directors desire to computerize the project operations from the point of identifying the need till the final product reaches the final consumer. Included in this cost item are a good Accounting package/software, network facility to suffice all departments and management. The company will have an efficient Management Information System (MIS) and the computers are necessary for the effective internal control system, budget control, marketing, finance management etc.

### **2.11.8. 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. 9,000US\$ will be allocated for the project operation.

### **2.11.9. 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 total raw material cost allocated budget is 2,476,000US\$ has been allocated. This will have facilitated collection of fresh milk from collection centers.

### **2.11.10. Project Implementation plan**

Full implementation of the project is planned to take place by end of 2024 and all machines has been ordered for importation from abroad.

### **2.11.11. Auxiliary Materials/ services**

Falling under this category is packing bags, paper for bags 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 and laboratory
- (ii) Electric power
- (iii) Water supply
- (iv) Miscellaneous facilities {Canteen; First Aid Kit, Storage and transport and Office Facilities}

**(i) Workshop and laboratory**

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. Installation of Laboratory for test quantity and quality of products has been considered to the project

**(ii) Electric Power and Generator**

The proposed projects 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. There also Heavy standby generators that will smoothen production process that generate 1000KVA. The Company also install an online UPS system that secures clean and uninterrupted power free of surges, brownouts, fluctuations and other power problems.

**(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 KASHUWASA water network, the agency is major supplier of water to urban and peri urban area in the city. While depending on water supply from KASHUWASA, the main line is close to the proposed industry from Mwanza Ihelele, in Misungwa District, Mwanza region.

The main line from this source has been 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, (60) Heavy trucks with a capacity of 32 MT will be purchased.
- 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.

### **2.11.12. Warehousing and distribution**

The Company's warehousing service is ready in place to meet 24/7/365 with produced products and raw materials imported. The efficiency of on-site combined with 10 loading docks (focal lift) will accommodate all needs and reduce supply chain costs. The industry will use 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.

### **2.11.13. 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 this strategic management for a Jambo Food Products Company 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 be 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. Organization, Manpower Requirement and Proposed Salary Budget.

#### 3.1. Employment.

The whole process of production lines is looking at providing direct employment to at least 73 permanent jobs on full implementation and operation of the project. Two of these workers will be expatriate staff from Tetra Pack company from Sweden and will train local staff for 3 months. Thereafter most of the production supervision will be taken over by local Tanzanians who by then will be expected to have acquired adequate experience in the operations and management of the project.

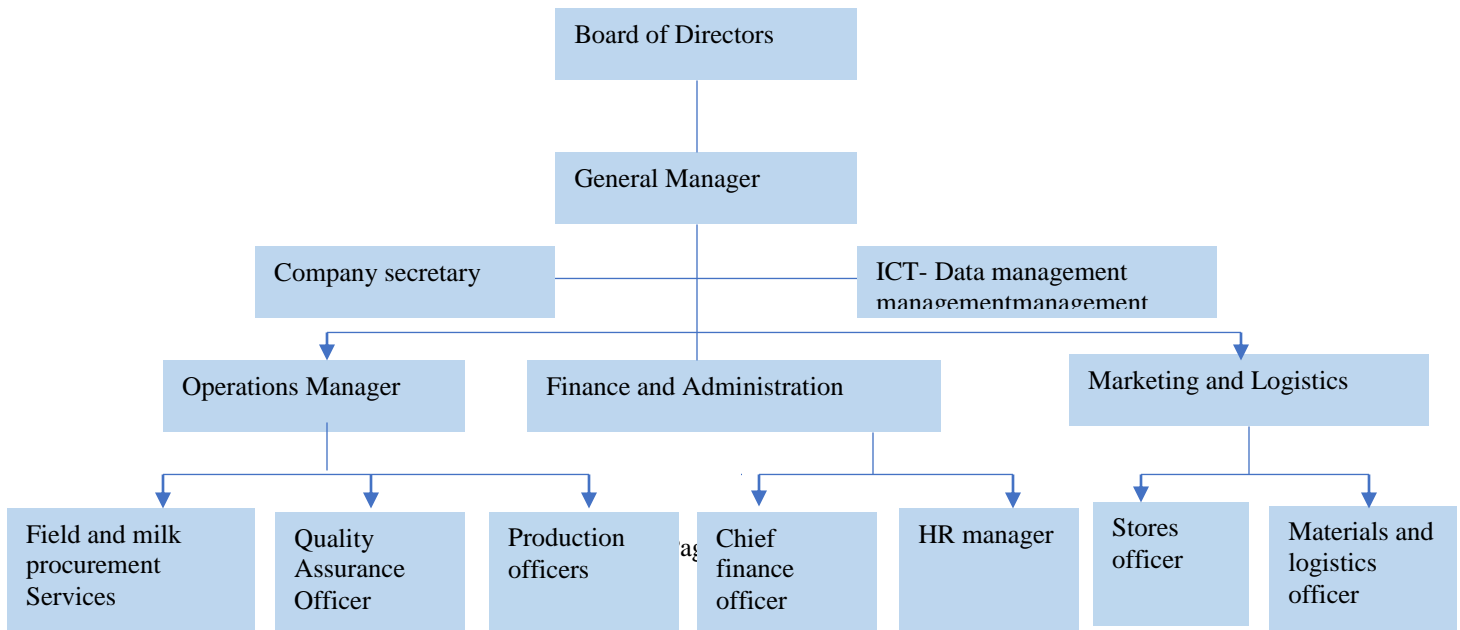
#### 3.2. Recruitment

Recruitment of the 71 (Excluding 2 international expert) 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 existing employees of the company, based on demonstration of skills and aptitude basis and their willingness to work for Jambo Food Products Company Limited. Careful methodology is being worked out by a competent management consultant who will set the job descriptions etc. 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. Management structure

Jambo Milk will be under the overall direction of a Board of Directors of the company constituted by shareholders and the company General manager as the Chief Executive Officer (CEO). The Board of the company will be responsible for policy guidance and control of the company affairs.

The GM will manage the day to day affairs of the company. He/she must be experienced in managing a dairy enterprise or similar enterprise in the Tanzania or E. Africa region fluent in Kiswahili and English. The GM will be assisted by three managers; Operations Manager, Finance and Administration and Marketing and Logistics. The organogram is show below.



### 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 have its own management under which the day to day leader/management of each production line will be vested in the management team headed by a Production Manager. The Production Manager is to be assisted by qualified and experienced personnel. The Production Managers will report to a General Manager who will be directly responsible to the Board of Directors. Proposed organization and manpower requirement for the plant is as follows:

S/N	Job title	No. of Persons	Monthly USD	Annual USD
1	Plant Manager	1	926	11,111
2	Finance / Admin Manager	1	556	6,667
3	Sales & Procurement Manager	1	356	4,267
4	Accounts Assistant	1	241	2,889
5	ICT and data manager	1	296	3,556
6	Shift Supervisors	1	281	3,378
7	Secretary	1	167	2,000
8	Plant Operators	6	185	13,333
9	Laboratory Staff	2	185	4,444
10	Procurement / Sales Staff	2	222	5,333
11	Mechanics	2	278	6,667
12	Drivers	50	241	144,444
13	Casual Laborers	2	74	1,778
14	Security Guards	2	93	2,222
	Staff Benefits			0
	<b>Total</b>	<b>73</b>	<b>4100</b>	<b>212,089</b>

## 4.0. Financial Analysis

### 4.1 Production, Revenue and project viability

- The estimated revenue gains in selling milk and milk products is 3,728,754 US\$ and has a steady increase for the second year sales excluding Value Added Tax.
- Net profit before tax is 2,960,022 USD, second year earning is 4,854,605 USD, which show the profit is increasing,
- Net profit after tax is 1,812,384 USD, second year earning is 2,972,414 USD, which show the profit is increasing,
- Gross sales contribution in the first year of production is 79% which increases tremendously in the second years up to 5 years
- The expected sales increase annually is 5% while increase production cost is 3% which depends on inflation rate of the country,
- Total investment cost of the project is 9.5 Million Euro equivalent to 10.6 Million USD whereas the own equity is 100%
- The end balance of project in cash flow statement is positive and increases tremendously.
- Testing the project viability is positive whereas IRR is positive 12.89% and payback period of project is within 4 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 tremendously.
- Cash generated from operation and net cash from operational activities increases positively of project (see cash flow sheet)
- Return on Investment is anticipated to above 17% which is above normal bank interest rate, which show in case promoter is willing to 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 uses 12.5% as depreciation factors. Depreciation is amounted to 259,002 USD 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 project contribution to NSSF (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, this is for products
- The business plan has an assumption all capital investment will be recovered within 4 years for 5 year projected economic life,

## 5.0. 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 Jambo Food Products Company 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.

### 5.1. 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.

### 5.2. Finance 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 (un-prospected milk) in the local market instead mostly of raw materials are imported.
- b) **Processing Risks:** The technology, machines and equipment used in processing are in rudimentary stages all of which contribute to reducing production efficiency. Also quality/milk safety and standards consideration in the production environment is limited. In Milk processing factories 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 processing factories quality and safety criteria and are usually very price sensitive.

### 5.3. 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, LGAS, NBS, NEMC etc, are regulatory role in issuing licensing.
- 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 Jambo Milk production company 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. Economic and Social Aspects

The project is also likely to have a positive impact on the economy of Lake Zone regions and 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

### 6.1. Impact Investment Index Framework

<i>Impact Investment Index</i>		
<b>Frame Work for JAMBO FOOD PRODUCTS COMPANY LIMITED</b>		
<b>Performance Area</b>	<b>Quantitative Indicator</b>	<b>Remarks</b>
<b>Investment Capital</b>	Total investment capital, CAPEX and OPEX US\$ 10.60 Million US\$	Substantial amount of capital invested into the domestic economy.
<b>Export Earnings</b>	Indicative Annual sales of 25% earnings of 932.20US\$ out of annual average collection of 3,728,754US\$ for the project will be exported.	Increased foreign earnings.
<b>Job requirements</b>	Job creation after plant in operation 2024-2029. DIRECT TANZANIAN JOBS 73 and more than 1000 INDIRECT JOB will be established	<ul style="list-style-type: none"> <li>• Reasonable number of direct job created to local Tanzanians with direct impact on poverty reduction through enhanced income generation; and</li> <li>• Improving skills development for Industrial production</li> </ul>
<b>Technology applied</b>	High Tech Environmentally friendly machinery	<ul style="list-style-type: none"> <li>• Enhancing technological transfer; and</li> <li>• Applied technology which is free from environmental pollution,</li> </ul>
<b>Other Implied Project Benefits</b>		
<ul style="list-style-type: none"> <li>▪ Increased sales to the Utility Companies providing services of electricity, water and sewerage, telecommunications;</li> <li>▪ Increased business transacted by local banks and institutions providing financial services;</li> <li>▪ Business opportunities for local entrepreneurs in market distribution channels,</li> <li>▪ Business opportunities to contractors and sub-contractors during the minor construction phase;</li> <li>▪ Increased regional intra-trade and international trade due to better infrastructure facility and links to markets;</li> <li>▪ Increase of technology transfer &amp; expertise to local employed staff,</li> <li>▪ Capital spends in local economy over 9.5Milion Euro and</li> <li>▪ Contribution to GDP growth through increased economic activities</li> </ul>		

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, Jambo Food Products Company 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.

## 6.2. Impact Investment Index (II) Framework

<b>IMPACT INVESTMENT INDEX</b>			
<b>FRAME WORK FOR JAMBO FOOD PRODUCT COMPANY LIMITED</b>			
<b>LOG FRAME</b>	<b>Evaluation Questions</b>	<b>Indicative Remarks</b>	<b>Indicative Measurements</b>
<b>IMPACT</b>	<ul style="list-style-type: none"> <li>➤ What changes did the project bring about?</li> <li>➤ Are the benefits likely to be maintained and extended over a long period?</li> <li>➤ Were there any unplanned changes?</li> </ul>	Assessed across various impact dimensions: <ul style="list-style-type: none"> <li>➤ Social, economic and environmental impacts</li> <li>➤ Direct and Indirect impacts</li> </ul>	<b><i>IMPACT AND SUSTAINABILITY</i></b>
<b>OUTCOME</b>	<ul style="list-style-type: none"> <li>➤ Were the project objectives achieved?</li> <li>➤ Did the output lead to the intended outcomes?</li> </ul>	. To be measured to illustrate the effect of the inputs on all aspects of the project and stakeholders. <ul style="list-style-type: none"> <li>➤ Effect on poverty alleviation</li> </ul>	<b><i>EFFECTIVENESS AND RELEVANCE</i></b>
<b>OUTPUTS</b>	<ul style="list-style-type: none"> <li>➤ Were outputs delivered economically?</li> </ul>	Short Term effect of the project.	
<b>ACTIVITIES</b>	<ul style="list-style-type: none"> <li>➤ Were activities implemented on schedule and within budget?</li> </ul>	All forms of activities in relation to the development of the project.	<b><i>EFFICIENCY</i></b>
<b>INPUTS</b>	<ul style="list-style-type: none"> <li>➤ Were funds available on time and in the right amount for the development of the project?</li> </ul>	Financial and Non fiscal inputs. <ul style="list-style-type: none"> <li>➤ Infrastructure development</li> <li>➤ Utilities supply</li> </ul>	

## 7.0. Financial Modeling and Analysis

The Financial Modelling and analysis, is the main source of information for assessing the potential financial viability of the Jambo Food Products Company 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 5-year time period. The purpose of establishing Milk processing plant is to speed up the country's economic development by being a catalyst for restructuring the existing local milk processing industrial set up and attracting new, both foreign and domestic entrepreneurs to a liberalized legal business framework.

### 7.1. Objective and Scope of Financial Model

#### 7.1.1. 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 Jambo Food Products Company 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.

#### 7.1.2. 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 Milk 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.

<i>Annually anticipated sales output for each products</i>	<i>Figures in USD</i>	<i>L/hours</i>	<i>12 Hours</i>	<i>26 days</i>	<i>Annual Production</i>	<i>Price per Liter</i>	<i>Annual sales</i>
Fresh milk- puch	332,640.00	2,500.00	30,000.00	780,000.00	9,360,000.00	0.56	5241600
Fresh milk (Bulk)	467,775.00	3,000.00	36,000.00	936,000.00	11,232,000.00	0.56	6289920
Cultured milk	1,018,710.00	1,000.00	12,000.00	312,000.00	3,744,000.00	0.74	2770560
Plain Yoghurt	452,760.00	750	9,000.00	234,000.00	2,808,000.00	0.74	2077920
Flavored Yoghurt	710,010.00	600	7,200.00	187,200.00	2,246,400.00	0.74	1662336
Pasteurized milk-ESL	573,804.00	1,500.00	18,000.00	468,000.00	5,616,000.00	0.74	4155840
Butter 400 grams	90,563.00	400	4,800.00	124,800.00	1,497,600.00	0.74	1108224
Cream	82,491.00	250	3,000.00	78,000.00	936,000.00	0.74	692640
<b>Total</b>	<b>3,728,753.00</b>	<b>10,000.00</b>	<b>120,000.00</b>	<b>3,120,000.00</b>	<b>37,440,000.00</b>		23,999,040.00

## ANNEX I – INCOME STATEMENT

<b>INCOME STATEMENT PROJECTIONS</b>								
<i>(ALL NUMBERS IN USD)</i>								
<b>REVENUE</b>	<b><u>YEAR 0</u></b>	<b><u>YEAR 1</u></b>	<b><u>YEAR 2</u></b>	<b><u>YEAR 3</u></b>	<b><u>YEAR 4</u></b>	<b><u>YEAR 5</u></b>	<b><u>TOTAL</u></b>	
<b>ALL FIGURES IN USD</b>								
<b>REVENUE GENERATED FROM SALES OF MILK AND MILK PRODUCTS</b>	-							
FRESH MILK- PUCH		332,640	503,712	549,953	600,439	655,559	2,642,302	
FRESH MILK (BULK)		467,775	708,345	773,371	844,367	921,880	3,715,738	
CULTURED MILK		1,018,710	1,542,618	1,684,231	1,838,843	2,007,649	8,092,051	
PLAIN YOGHURT		452,760	685,608	748,547	817,264	892,289	3,596,467	
FLAVORED YOGHURT		710,010	1,075,158	1,173,858	1,281,618	1,399,271	5,639,915	
PASTEURISED MILK-ESL		573,804	868,903	948,669	1,035,757	1,130,839	4,557,972	
BUTTER 400 GRAMS		90,563	137,138	149,728	163,473	178,479	719,381	
CREAM		82,491	124,915	136,382	148,902	162,571	655,261	
		60%	100%	100%	100%	100%		
<b>TOTAL OPERATING REVENUE</b>	-	<b>3,728,754</b>	<b>5,646,398</b>	<b>6,164,739</b>	<b>6,730,663</b>	<b>7,348,539</b>	<b>29,619,092</b>	
<b>EXPENSES</b>		<b><u>YEAR 0</u></b>	<b><u>YEAR 1</u></b>	<b><u>YEAR 2</u></b>	<b><u>YEAR 3</u></b>	<b><u>YEAR 4</u></b>	<b><u>YEAR 5</u></b>	<b><u>TOTAL</u></b>
SALARIES AND WAGES		212,089	218,452	225,005	231,755	238,708	1,126,009	
RAW MILK PURCHASE		96,000	98,880	101,846	104,902	108,049	509,677	
COST OF PACKAGING		36,000	37,080	38,192	39,338	40,518	191,129	
CHEMICAL INGREDIENTS		36,000	37,080	38,192	39,338	40,518	191,129	
ELECTRICITY		22,000	22,660	23,340	24,040	24,761	116,801	
WATER		14,000	14,420	14,853	15,298	15,757	74,328	
FUELS FOR STEAM BOILER		15,000	15,450	15,914	16,391	16,883	79,637	
DISTRIBUTION EXPENSES		75,000	77,250	79,568	81,955	84,413	398,185	

<i>MEDICAL EXPENSES</i>	5,850	6,026	6,206	6,392	6,584	31,058
<i>SPARE AND MACHINES MAINTENANCE</i>	53,311	54,910	56,558	58,254	60,002	283,035
<i>MOTOR VEHICLE EXPENSES - FUEL AND LUBRICANTS</i>	145,178	149,533	154,019	158,640	163,399	770,770
<i>DIRECTOR NUMERATIONS</i>	20,096	20,699	21,320	21,959	22,618	106,692
<i>BRANDING AND LABELLING</i>	7,500	7,725	7,957	8,195	8,441	39,819
<i>LEGAL FEE AND AUDIT</i>	3,000	3,090	3,183	3,278	3,377	15,927
<i>SALES/MAREKTING AND RENTAL COLLECTION POINT</i>	12,000	12,360	12,731	13,113	13,506	63,710
<i>PAYROL LEVY (3%)</i>	3,708	3,819	3,934	4,052	4,173	19,686
<i>REGULATORY FEES (TDB, TBS, NEMC, OSHA, FIRE, LGAS)</i>	12,000	12,360	12,731	13,113	13,506	63,710
<b><i>TOTAL OPERATING COSTS</i></b>	<b>768,732</b>	<b>791,794</b>	<b>815,548</b>	<b>840,014</b>	<b>865,215</b>	<b>4,081,302</b>
<b><i>OPERATIONAL NET EARNINGS BEFORE DEPRECIATION, INTEREST &amp; TAX</i></b>	<b>2,960,022</b>	<b>4,854,605</b>	<b>5,349,191</b>	<b>5,890,649</b>	<b>6,483,324</b>	<b>25,537,790</b>
<i>%AGE GROSS CONTRIBUTION</i>	79	86	87	88	88	1
<b><i>DEPRECIATION AT 12.5 %</i></b>	<b>259,002</b>	<b>424,778</b>	<b>468,054</b>	<b>515,432</b>	<b>567,291</b>	<b>2,298,401</b>
<b><i>NET EARNINGS BEFORE TAX &amp; INTEREST</i></b>	<b>2,701,020</b>	<b>4,429,827</b>	<b>4,881,137</b>	<b>5,375,217</b>	<b>5,916,033</b>	<b>23,239,389</b>
<b><i>INTEREST PAID (BANK LOAN)</i></b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b><i>TAX (30%)</i></b>	<b>888,636</b>	<b>1,457,413</b>	<b>1,605,894</b>	<b>1,768,446</b>	<b>1,946,375</b>	<b>7,666,764</b>
<b><i>NET EARNINGS</i></b>	<b>1,812,384</b>	<b>2,972,414</b>	<b>3,275,243</b>	<b>3,606,771</b>	<b>3,969,658</b>	<b>15,636,470</b>

## ANNEX II - CASH FLOW

<i>Cash Flow statement from Investing Activities for five years</i>					
(all numbers in USD	Year 1	Year 2	Year 3	Year 4	Year 5
<b><u>CASH FLOW FROM OPERATING ACTIVITIES</u></b>					
Cash receipts from Sales	3,728,754	5,646,398	6,164,739	6,730,663	7,348,539
Cash paid to suppliers and employees	(768,732)	(791,794)	(815,548)	(840,014)	(865,215)
Cash generated from operations	2,960,022	4,854,605	5,349,191	5,890,649	6,483,324
Dividends received*	0	0	0	0	0
Interest received	0	0	0	0	0
Interest paid	0	0	0	0	0
Tax paid	(888,636)	(1,457,413)	(1,605,894)	(1,768,446)	(1,946,375)
<b>Net cash flow from operating activities</b>	<b>2,071,386</b>	<b>3,397,192</b>	<b>3,743,297</b>	<b>4,122,202</b>	<b>4,536,949</b>
<b><u>CASH FLOW FROM INVESTING ACTIVITIES</u></b>					
Replacement of equipment	0	0	0	0	0
Proceeds** from sale of equipment	0	0	0	0	0
<b>Net cash flow from investing activities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b><u>CASH FLOW FROM FINANCING ACTIVITIES</u></b>					
Proceeds from capital contributed	0	0	0	0	0
Proceeds from loan	0	0	0	0	0
Payment of loan	0	0	0	0	0
<b>Net cash flow from financing activities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b><u>NET INCREASE/ DECREASE IN CASH</u></b>					
Cash at the beginning of the period	1,812,384	2,972,414	3,275,243	3,606,771	3,969,658
Cash at the end of the period	<b>3,883,770</b>	<b>6,369,605</b>	<b>7,018,540</b>	<b>7,728,973</b>	<b>8,506,607</b>

## ANNEX III – BALANCE SHEET

<i>PRO FORMA BALANCE SHEET</i>					
<i>(ALL NUMBERS IN USD)</i>	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>YEAR 4</b>	<b>YEAR 5</b>
<b><u>ASSET</u></b>					
<i>CURRENT ASSET</i>	1,812,384	2,972,414	3,275,243	3,606,771	3,969,658
<i>FIXED ASSET</i>	8,115,000	7,465,800	5,972,640	4,778,112	3,583,584
<i>LIQUIDITY</i>	2,960,022	4,854,605	5,349,191	5,890,649	6,483,324
<i>TOTAL ASSET</i>	12,887,406	15,292,818	14,597,074	14,275,531	14,036,566
<i>NET ASSET MINUS DEPRECIATION</i>	<b>12,628,404</b>	<b>14,868,040</b>	<b>14,868,020</b>	<b>13,766,099</b>	<b>13,469,276</b>
<b><u>EQUITY &amp; LIABILITIES</u></b>					
<i>EQUITY</i>	10,600,000	10,812,000	11,028,240	11,248,805	10,348,900
<i>RESERVES</i>					
<i>TOTAL OWN EQUITY</i>	<b>10,600,000</b>	<b>10,812,000</b>	<b>11,028,240</b>	<b>11,248,805</b>	<b>10,348,900</b>
<i>PROVISIONS</i>	880,767	2,173,849	1,026,831	227,416	606,709
<i>LONG TERM LOAN</i>	0	0	0	0	0
<i>SHORT TERM LIABILITIES</i>	1,147,637	1,882,191	2,073,948	2,283,878	2,513,666
<i>TOTAL EQUITY &amp; LIABILITIES</i>	<b>12,628,404</b>	<b>14,868,040</b>	<b>14,129,020</b>	<b>13,760,099</b>	<b>13,469,276</b>
<i>NET FA/CL</i>	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
<i>CL/CA</i>	0.63	0.63	0.63	0.63	0.63
<i>DEBIT/CAPITAL RATIOS</i>	0.16	0.27	0.22	0.18	0.23
<i>ROI</i>	17.1	27.5	29.7	32.1	38.4
<i>BREAK EVEN POINT</i>	2.74	1.54	1.12	0.81	0.55
<i>BREAK EVEN RATIO</i>	0.65	0.55	0.54	0.53	0.52
<i>EQUITY/TOTAL LIABILITIES</i>	84	73	78	82	77

## ANNEX IV – INTERNAL RATE OF RETURN

<i>IRR for the Project</i>		
	(all numbers in USD	
	Initial Investment	-10,600,000
Year 1	Additional Annual Net Profit	1,812,384
Year 2	Additional Annual Net Profit	2,972,414
Year 3	Additional Annual Net Profit	3,275,243
Year 4	Additional Annual Net Profit	3,606,771
Year 5	Additional Annual Net Profit	3,969,658
	<b>IRR (in 5years)</b>	<b>12.89%</b>
<p>The IRR above indicates that the expected return on the US\$ 10,600,000 initial investment after 5 years is 12.89%</p>		

## ANNEX V – PAYBACK PERIOD

<i>Payback Period Analysis</i>				
	Year	Beginning Balance	Net Cash Flows	Ending Balance
Cost of investment	0.00	10,600,000.00	0.00	10,600,000.00
	1.00	10,600,000.00	1,812,384.29	8,787,615.71
	2.00	8,787,615.71	2,972,413.68	5,815,202.02
	3.00	5,815,202.02	3,275,242.80	2,539,959.23
	4.00	2,539,959.23	3,606,770.50	1,066,811.28
	5.00	1,066,811.28	3,969,658.31	5,036,469.59
<b>Payback Period =</b>		<b>4.00</b>	<b>Years</b>	

## **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 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, Jambo Food Products Company 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 Milk plant facility is financed 100% by shareholder, gives an IRR of about 12.89%. 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 4 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 face reserves difficulties during the third 3 years thereafter the project will, 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 Jambo Food Products Company Limited is designed to take 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 (2010-2015); Prioritize private investment in the context of Public Private Partnership. The First Five Years Development Plan (2011-2016) 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 (2010-2015) 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 Jambo Food Products Company Limited to ensure development of one among the ultra-modern Milk plant to be developed in Shinyanga 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 Milk plant will be funded by private finances. The company acting through its various shareholders and structures will provide the initial risk capital amounting to 9.5 Million Euro equivalent to 10.6 Million US\$ will be raised. 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. The company has to accomplish the following;

**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 Mwanza 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) Minor rehabilitation to Milk Processing Industrial requirement**

The company should engage a firm to make minor rehabilitation of existing structure that will suit Milk 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.

**(c) Mobilizing Funds**

As previously discussed on the Financial Analysis of this business plan, financing mechanism for the Milk 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.